EFFECTS OF MANAGERS' NETWORK TIES ON FIRM PERFORMANCE: A COMPARISON OF STATE-OWNED, PRIVATE, AND FOREIGN ENTREPRENEURIAL ECONOMY HOTELS IN CHINA

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Zhaoping Liu

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EFFECTS OF MANAGERS' NETWORK TIES ON FIRM PERFORMANCE: A COMPARISON OF STATE-OWNED, PRIVATE, AND FOREIGN ENTREPRENEURIAL ECONOMY HOTELS IN CHINA

Zhaoping Liu, Ph. D.
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A central dilemma of social network research is conflicting results on whether strong ties are more important than weak ties. This study proposes that "ownership type" is a key contingent factor for resolving the strong tie versus weak tie dilemma. The main purpose of this study is to examine the effects of managers' network ties on entrepreneurial economy hotels and to test whether the comparative effects of managers' strong ties versus weak ties differ among firms of different ownership types. Based on a survey of 230 general managers of economy hotels in China, the overall regression results show that the uses of network ties are positively related to firm performance. The subgroup analysis suggests that ownership type is a contingent factor for the strong tie and weak tie paradox. For private firms, the uses of weak ties (UWT) are positively related to firm performance; for joint ventures, the uses of strong ties (UWT) are positively related to firm performance; for SOEs, the uses of weak ties were negatively related to firm performance. These results are consistent with hypotheses derived from agency theory and institutional theory. Theoretically, this study provides new insights to resolve the paradox of social network theory regarding the relative importance of strong ties and weak ties and proved ownership

type to be a new contingent factor. Practically, managers are encouraged to use a networking strategy to improve firm performance, but firms of different ownership types should use different networking strategies.

BIOGRAPHICAL SKETCH

Zhaoping Liu earned a Bachelor of Science degree in the Mathematics Department and a Master of Economics degree in the Tourism Department at Nankai University and a Master of Science degree in the Recreation and Leisure Studies Department at East Carolina University. He worked for the China National Tourism Administration (CNTA) for three and a half years. He taught a hospitality strategic management course as a visiting lecturer at the School of Hotel Administration at Cornell University in 2007.

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CHAPTER ONE

INTRODUCTION

Background of the Research

New ventures face the liability of newness (Stinchcombe, 1965). Many new ventures address the liability of newness through building networking capabilities, because networks can offer many benefits to new ventures (Johannisson, 2000). Some studies have discussed the importance of owners/managers' social networks in the entrepreneurial process in particular (Aldrich & Zimmer, 1986; Hoang & Antoncic, 2003). Quite a few studies have suggested that entrepreneurs benefit from their networks in identifying opportunities, acquiring resources, and gaining legitimacy (Elfring & Huosink, 2003, 2007; Hoang & Antoncic, 2003).

Social network theory holds that the patterns of relations between social actors influence a variety of outcomes (Stuart & Sorenson, 2005). However, conflicting results exist on whether strong ties are more important than weak ties (Bruderl & Preisendorfer, 1998; Grannovetter, 1973, 1974). Granovetter (1973) believed that weak ties are more important in getting new information because weak ties often compose local bridges to members of different groups. However, Bruderl and Preisendorfer (1998) concluded that actors linked by strong ties are more willing to offer help during small business formation.

Granovetter (1973) suggested that the strength of a tie is a combination of "the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie" (p.1361). Marsden and Campbell (1984) suggested that the measure of emotional intensity of a relationship is the best indicator of tie strength after comparing it with two other measurements of tie strength (the amount of time spent in a tie and intimacy). Duration and frequency of contact, both measures of time spent in a relationship, were not recommended.

The reasons are that duration tends to overestimate the strength of ties between relatives and frequency tends to systematically overestimate the strength of ties between neighbors and co-workers. Other studies on the measurement of tie strength showed similar results (Marsden, 1990; Mitchell, 1987). Marsden and Campbell (1984) used a trichotomous variable for "closeness," those of acquaintance, good friend, and very close friend, to measure three intensities of tie strength. Some studies have used ties with friends and ties with acquaintances to distinguish between strong ties and weak ties (Batjargal, 2003; Lin, 2001a, 2001b; Lin & Dumin, 1986).

This study followed the dichotomous tradition and used "ties with friends" and "ties with acquaintances" to distinguish between strong ties and weak ties (Batjargal, 2003; Granovetter, 1973; Lin, 2001a; Lin & Dumin, 1986). Friends are defined as those with whom one has both reciprocal and altruistic relationships and acquaintances as those with whom one only has reciprocal relationships. Since not everyone has a clear-cut boundary between friends and acquaintances and the membership of either group is not static in an ever-changing environment, defining strong and weak ties using the ties-with-friends and ties-with-acquaintances approach is challenging. Further explanation will emerge in the methodology section.

This study proposes that ownership type (state-owned, private, joint venture, and exclusively foreign-owned) could be a moderating factor that reconciles the strong tie versus weak tie paradox. Institutional theory seems to be the most appropriate perspective from which to address the different effects of managers' network ties between domestic and foreign firms in a transitional economy (Luo, 2003). Since the regulative systems, normative systems, and cultural-cognitive systems are different than those in their home countries for foreign firms, these differences can result in different operational strategies for their managers (Steensma, Tihany,

Griffith, & Russell, 2005; Chua, Morris, & Ingram, 2009). The different institutional systems may affect the use of network ties for managers of foreign firms and influence the network effects on firm performance.

The different effects of managerial network ties of state-owned enterprises (SOEs) and other firms could be caused by principal-agent problems. Agency theory indicates that conflict of interests between principal and agent may bring company governance problems (Mahoney, 2005). Because owners of private economy hotels and some joint ventures can pocket residual income, they are more highly motivated to spend resources on networking than are state-owned firms (Peng, 2000). Li and Zhang (2007) indicated that managers of SOEs may spend much time on networks that can secure their careers (their own interests), not on those ties that will improve firm performance (owners' interests).

Although most studies have agreed that managerial ties play important roles under conditions featuring weak institutional supports and distorted information (Peng & Luo, 2000), opinions differ on whether network ties are continuously effective with a more complete institutional system. After years of efforts to transform from a planned system to a market-based system, China has made critical improvements in its institutional systems. By testing the effects of managerial ties on firm performance many years after a large number of previous studies, this study can provide evidence to support either the institution-based or culture-based network view. The information collected during the author's preliminary field visit showed that managerial ties still play important roles in improving firm performance.

China is a typical transitional economy, where *guanxi* (network) has been a key factor in the people's social economic life. The recent emergence and growth of the economy hotel sector provides an ideal field for conducting studies on entrepreneurial firms. A preliminary field trip

has identified different network patterns for executives from firms of different ownership types. A large-sample quantitative study is needed to test whether the exploratory results hold for the whole population.

Statement of the Problem

Previous research has shown that certain characteristics of networks are more effective in improving new firms' performances than others (Hoang & Antoncic, 2003; Johannisson, 2000). Some studies have found a relationship between network size and firm performance (Zhao & Aram, 1995; Johannisson, 2000). Other studies have proved a link between network strength (strong ties versus weak ties) and firm performance (Bruderl & Preisendorfer, 1998; McEvily & Zaheer, 1999). A number of studies have also tested the effects of multiple network variables at the same time (Aldrich, Rosen, & Woodward, 1987; Hansen, 1995; Watson, 2007). However, most of the studies have assumed the homogeneity of managers' network effects on all firms. Institutional theory and agency theory suggest that, in a transitional economy such as that of China, firms of different ownership types may not benefit equally from managers' networks (Luo, 2007).

A central dilemma of network research is conflicting results on whether strong ties are more important than weak ties (Bruderl & Preisendorfer, 1998; Grannovetter, 1973, 1974; Krackhardt, 1992; Jack, Dodd, & Anderson, 2004; Suarez, 2005). Some studies have tried to reconcile contradictory results by using a contingency approach (Elfring & Hulsink, 2003). For example, the stage of firm development (Starr & Macmillan, 1990) and the selection of outcome variables (Bruderl & Priesendorf, 1998) are two factors that may affect the benefits of strong ties versus weak ties. This study plans to test "ownership type" as a key contingency factor for resolving the strong-tie versus weak-tie dilemma. It proposes that, because of different cultural

backgrounds, historical paths, and governance systems among firms of different ownership types, both strong ties and weak ties will be positively related to firm performance for joint ventures and private firms, with strong ties being more important than weak ties, while managers' network ties will have negative impacts on firm performance for SOEs.

Previous studies have shown a positive relationship between managerial ties and firm performance (Peng & Luo, 2000), and a conclusion has been drawn that managerial ties can enhance firm performance. However, the possibility of a reverse causal relationship has not been ruled out. Successful managers should be sought out by more network partners. In addition, these managers of firms with better performance should have more resources to build up relational ties. The current study tried to address this issue by importing instrument variables.

Network ties do not always produce positive effects, especially for strong ties (Gargiulo & Benassi, 1999). Unlike weak ties, strong ties are very time-consuming to develop and maintain. Managers have to spend much time and other resources to maintain strong ties. When managers spend too much time dealing with strong ties, they may lack the time and energy to improve market compatibility (Peng & Luo, 2000). This means strong ties will not always improve firm performance. Under certain conditions, it may become a liability for managers to have too many strong ties.

Purpose of the Study

The main purpose of this study is to examine the effects of managers' network ties on entrepreneurial economy hotels and to test whether the comparative effects of managers' strong ties versus weak ties differ among firms of different ownership types. The proposed research also aims to investigate the effectiveness of managerial ties in China's current institutional

environment. This study intends to discover the optimal strong and weak tie patterns for SOEs, private firms, and joint ventures.

Research Questions

In summary, the proposed study aims to address the following research questions:

1. Do managers of firms of different ownership types use different numbers of network ties?

2. Will network ties always be effective in China? Or will the effectiveness of network ties depend on the institutional environment of the firm?

3. Are strong ties more important than weak ties in impacting firm performance?

4. How does the comparative importance of managers' strong ties versus weak ties differ among SOEs, private firms, joint ventures, and exclusively foreign-owned firms?

5. Do managerial ties always positively affect firm performance?

6. Are there any causal relationships between managers' network ties and firm performance?

Method

To compare the numbers of managerial ties for firms of different ownership types, a multivariate analysis of variance (MANOVA) method has been used. Moreover, this study proposes that two factors (managers' strong ties and weak ties) may affect firm performance. Multiple linear regression is an appropriate method for measuring the effects of several factors. To compare the effects of managerial ties for firms of different ownership types, this study also runs subgroup regression analysis for each type of firm.

In addition to the quantitative statistical method, the central theme of the study calls for a comparative methodology to contrast the institutional environment as well as the governance

structures for firms of different ownership types (Armer & Grimshaw, 1973; Ragin, 1987; Smelser, 1976).

Significance of the Study

This study would interest both entrepreneurship theorists who might want to pursue networking as a source for overcoming the liability of newness and academic researchers in the hospitality field who are ready to explore the effects of managers' networks in the entrepreneurial process. Theoretically, this study will test the effects of managerial ties under China's current institutional system and provide evidence to clarify whether network ties are institutional-based or culture-based. Many studies (e.g., Yang, 1994, 2002) have claimed that China is a *guanxi*-based society, where network ties have been and will be very important to firm performance. However, Guthrie (1998) and Peng (2002, 2003) have suggested that network ties are institution-based and that the significance of network ties will decline with a more formalized regulation system. The institution-based view has been supported by many other studies (Fan, 2002a, 2002b; Tan, Yang, & Veliyath, 2009).

In addition, the study addresses an important paradox of social network research. By importing a new variable, "ownership type," into the model, this study may reconcile the central argument of strong ties versus weak ties in this field. It proposes that the extent to which firms can benefit from strong or weak ties may differ among SOEs, private firms, joint ventures, and exclusively foreign-owned firms.

Methodologically, this research tried to solve the reverse causality problem ignored in many previous studies. Stuart and Sorenson (2007) argued that social network characteristics might not be the cause of such dependent variables as firm performance but rather their result. The design of the current research attempted to address this problem by importing two

instrument variables: the number of close family members in the industry and the types of social media used by the managers. The research design made it possible to confirm causal relationships between network ties and firm performance and address the endogeneity problem, but, due to the weak instrument variable problem, this objective was not reached.

Empirically, entrepreneurs interested in starting hospitality firms in China or relevant stakeholders of economy hotels would be interested in the study's findings. The findings might help managers in firms of different ownership types to manage their network ties by picking the optimal strong tie and weak tie mixes to increase firm performance.

The next chapter provides a review of the literature and proposes a series of hypotheses based on theoretic frameworks such as social network theory, institutional theory, and agency theory. These hypotheses propose that there are significant differences among the numbers of network ties for managers of firms of different ownership types and that the effects of managerial ties differ among the types.

Starting with the rationales for using survey research, the third chapter introduces the methodology of the current research. The process of sampling and data collection in the research setting is introduced. Multiple ways of measuring variables are explained in detail. The statistic tools used to analyze data are described at the end of Chapter Three.

The fourth chapter shows all the results from the survey research. The contents of this chapter include the sample profiles, the MANOVA results of comparing network sizes, the effects of managerial ties for the whole dataset, and the subgroup results of managerial ties' effects for SOEs, private firms, and joint ventures.

The fifth chapter evaluates the effectiveness of the study, discusses their implications and meanings, and lists questions raised by this research. A few limitations of the study are discussed and new directions and topics for future studies are suggested.

The Chinese and English versions of the survey instruments are included in the appendices. A picture of the survey incentive, a Cornell Hotel School souvenir, is also shown there.

CHAPTER TWO

LITERATURE REVIEW

This chapter is composed of three major sections. The first section considers network ties as a dependent variable and proposes that the numbers of managers' network ties may differ among firms of different ownership types. The next section weighs two different views, the institution-based view and culture-based view of network ties which are seen as leading to dissimilar results. The last section compares the distinct roles of managers' strong ties versus weak ties for SOEs, private firms, and joint ventures.

Comparison of the Numbers of Managers' Network Ties

Ownership type as a strategic factor in transitional economies

Many studies (Peng, 2003; Tan, 2002) and official statistics (e.g., see National Bureau of Statistics of China) have used ownership type to differentiate firms. The self-explanatory characteristic of ownership has resulted in many studies' use of the term without clearly defining it (Li, Poppo, & Zhou, 2008; Peng & Luo, 2000; Zou & Adams, 2008). "Ownership is the state or fact of exclusive rights and control over property, which may be an object, land/real estate or intellectual property" (wikipedia, 2010). "Classic notions of property rights carried over to both modern common and civil-law divides property rights into three major categories: *Usus*, the right to use your property as you see fit, *Abusus*, the right to alter, modify, or destroy your property and *Fructus*, the entitlement to enjoy and employ the fruits from your property" (Gedajlovic, 1993, p.733).

The China Economy Hotel Survey (China Hotel Association, 2006-2009) defined SOEs as enterprises whose major shareholders are national, provincial or local government and government agencies. Private firms were defined as firms owned by Chinese proprietors,

partners, or public companies whose major shareholders were Chinese proprietors and partners. Foreign firms were defined as firms wholly owned by companies registered in a country other than China or joint ventures whose major shareholders were companies registered in a country other than China. “Joint ventures are business agreements where by two or more owners create a separate entity” (Harrigan, 1988, p.142). In this study, “ joint ventures” specifically refers to business agreements by at least one domestic and one foreign owner to create a separate entity and the entity thus created.

Ownership type has been cited as a strategic variable (Gedajlovic, 1993) and some studies have used it to classify firms into different strategic groups (Peng, Tan, & Tong, 2004). Due to institutional variety, firms of different ownership types have been embedded within different historical, institutional, and economic contexts and might select different environment-strategy configurations (Tan, 2002). The different objectives and governance systems of those types of firms may directly affect their firm performance (Baum, Calabrese, & Silverman, 2000; Greenwood, Deephouse, & Li, 2007).

Comparison of managers’ network ties among firms of different ownership types

A relational tie is a linkage between two actors (Wasserman and Faust, 1994). Gelekanycz & Hambrick (1997, p. 654) defined managerial ties as “executives’ boundary-spanning activities and their associated interactions with external entities.” When reviewing the network-based research on entrepreneurship, Hoang and Antoncic (2003) summarized many studies under a category treating network ties as dependent variables.

Network size is an essential variable for network structure. The size of an ego-network can be defined as “the number of direct links between a focal actor and other actors” (Hoang & Antoncic, 2003, p. 171). Among the many studies of network size, Aldrich *et al*. (1987) tested

the network size and compared the amount of network activity between male and female entrepreneurs, while Carroll and Teo (1994) compared key network characteristics for entrepreneurs and managers. The present study focuses on comparing the sizes of networks among managers from firms of different ownership types.

A common typology of network ties is between strong ties and weak ties. Empirical studies have found that both strong ties and weak ties play important roles in improving firm performance (Jack, 2005; Julien, Andiambeloson, & Ramangalahy, 2004). Jack (2005) demonstrated that strong ties are instrumental for business activity. Julien *et al*. (2004) confirmed that weak tie networks are important for the technological innovation of small and medium-size enterprises.

Entrepreneurial foreign firms (especially exclusively foreign-owned firms) face the liability of foreignness in addition to the challenge of newness (Autio, Sapienza, & Arenius, 2005; Fernhaber and McDougall, 2005). Zaheer (1995) attributed four potential sources of liability of foreignness.

> First, costs associated with spatial distance can arise when conducting business internationally. A second type of constraint can develop due to the firm's unfamiliarity with and lack of roots in the local environment. Third, the lack of legitimacy of foreign firms or economic nationalism within the host-country environment can act as a barrier to international entry. Last, firms can experience constraints from their home-country environment, such as sales restrictions to certain countries or consumer backlash due to political conflict between nations. (Fernhaber and McDougall, 2005, pp. 120-121).

Zaheer and Mosakowski (1997) suggested that foreign-based companies lack the necessary local connections due to lack of embeddedness (Autio *et al*., 2005). The lack of roots in the local environment also prohibited managers of foreign firms from exploring the benefits of network

ties to the extent that domestic firms did. Due to this liability of foreignness, the current study hypothesizes that the managers of new foreign firms have fewer strong ties than those of domestic firms.

In transition economies, significant differences have existed among different types of domestic firms (Peng and Heath, 1996; Peng, 1997; Peng and Luo, 2000; Wing andYiu,1996). In China, many managers of state-owned firms are former officials in the government or from parent SOEs managed by government officials (Walder, 2011). These managers' embeddness in the government has provided them easier access to government officials and a longer time to develop strong relationships with those officials (Peng and Luo, 2000). Though China's transition from a planned economy toward a market economy has weakened the connections between government officials and managers of SOEs, the historical relationships are very likely to be maintained for a long period of time. This suggests that the managers of state-owned firms will have more strong political ties (political ties were defined as ties with political leaders in the government, officials in industrial bureaus, and officials in regulatory and supporting organizations) than private firms.

In the transitional economy of China, SOEs used to be the dominant ownership type for enterprises. The relatively longer history of SOEs endows their managers with more strong business ties (business ties are defined as ties with executives of suppliers, buyers, and competitors) than managers in other firms. Moreover, the SOE reform process led to many location-based giant tourism groups supported by regional government, such as the Beijing Tourism Group and Jin Jiang International in Shanghai. Belonging to the same parent companies brought many managers in economy hotels together with other local hospitality firms. This created more strong business ties for SOE managers.

Hypothesis 1a: Managers of foreign firms have fewer strong ties than those of state-owned and private firms.

Hypothesis 1b: Managers of state-owned firms have more strong ties than those of private firms.

The Effects of Managerial Ties on Firm Performance

Firm performance and measurement

In management research, organizational performance is among the most important constructs (Richard, Devinney, Yip, & Johnson, 2009). One study found that almost one-fourth of the articles published in three top management journals over a three-year period used some kind of performance measure as a dependent variable (March & Sutton, 1997).

The popular objective measures of organizational performance include accounting measures, such as earnings before interest and taxes (EBITDA), market share, net operating profits, return on investment (ROI), return on equity (ROE), return on sales (ROS), sales, sales growth, and financial market measures, such as stock price, beta coefficient, and price-to-earnings ratio (Chakravarthy, 1986; Liao, 2004; Richard *et al*., 2009).

A variety of constructs, including those aforementioned, have been used to measure hotel performance. For instance, Gu and Qian (1999) used five accounting ratios, including return on assets (ROA), and one financial market measure, stock return (SR), as performance variables. Chow, Haddad, Leung, and Sterk (2003) chose economic value added (EVA) over two commonly used financial performance measures. Total sales revenue was selected as one of the four measurements of performance in a study by Huang, Chu, and Wang (2007).

Some performance measurements have been specifically designed for the hotel industry. For example, Claver-Cortes, Molina-Azorin, and Pereira-Moliner (2007) used occupancy rate,

gross operative profit (GOP), and gross profit per available room and day (GOPPAR per day) to measure hotel performance. Room revenue per head was used by Haktanir and Harris (2005) to measure hotel performance. Among hotel performance measures, one of the most popular is RevPAR, revenue per available room (Canina, Enz, & Harrison, 2005; Chung & Kalnins, 2001; Enz & Canina, 2002; Ismail, Dalbor, & Mills, 2002).

RevPAR, calculated by dividing revenue by number of rooms, or multiplying the average daily rate by occupancy rate, is a standard hotel industry measure for performance (Ismail *et al*., 2002; Gallagher & Mansour, 2000; Jacobs, 1997; Wood, 1994). "This indicator serves as the basis for long-term business planning and is used as a guide by investors and hotel owners and general managers" (Canina *et al*., 2005, p.572).

The occupancy rate equals the total rooms sold divided by the number of rooms available. This is another popular performance measure in the hotel industry. Occupancy rate can monitor the interaction consequences between hotel supply and demand, and it is a reliable measure applicable to most types of hotels (Jeffrey & Barden, 2000, 2001; Koenig & Bischoff, 2004).

One shortcoming of RevPAR and occupancy rate is that they only pay attention to sales without considering profits (Jacobs, 1997). Many studies have suggested using multiple measures of performance (Brush & Vanderwerf, 1992; Canina *et al*., 2005; Chandler & Hanks, 1993; Richard *et al*., 2009; Robinson, 1999; Wiklund & Shdperd, 2005).

Managerial ties and firm performance: the micro-macro link

Peng and Luo (2000) demonstrated a link between the micro-level construct of managerial ties and the macro-level phenomenon of firm performance. A number of studies by others have shown that certain characteristics of managerial network ties are related to the performance of entrepreneurial firms (Hoang and Antoncic, 2003; Johannisson, 2000). For

example, research has proved that larger network size will improve firm performance (Johannisson, 2000; Lerner, Brush, & Hisrich, 1997). Other studies have found relationships between network strength (strong ties vs. weak ties) and firm performance (Bruderl & Preisendorfer, 1998; McEvily & Zaheer, 1999).

Because weak ties often establish connections to incoherent social units and lead to original information, they play important roles in information dissemination and can improve managers' efficiency in identifying new opportunities (Burt, 1992; Elfring & Hulsink, 2003; Granovetter, 1973, 1974, 1982, 1983; Ruef, 2002). In addition, a diverse set of weak ties can lead to capital, customer, and supplier referral, etc. (Jack *et al*., 2004). Compared with weak ties, strong ties are more likely to offer financial resources to high-risk entrepreneurial firms (Granovetter, 1982; Krackhardt, 1992; Uzzi, 1996, 1997). The trust between actors linked by strong ties will provide managers easy access to resources that are hard to exchange on the market (Aldrich, 1999; Jack, 2005).

A transitional economy has three characteristics: "(a) lack of a property-rights-based legal framework, (b) lack of a stable political structure, and (c) lack of strategic factor markets" (Peng and Heath, 1996, p.504). With the old planned economy system declining and the new market economy system yet to be established, network ties play very important roles in the transitional economy of China due to the lower governance cost. Here, network strategy is a substitute for the failed hierarchy and market-based governance structures. (Boist and Child, 1998; Nee, 1992). In the transitional economy of China, "the social capital embedded in managerial ties may be more important in imperfect competition characterized by weak institutional support and distorted information" (Peng & Luo, 2000, p. 486). To sum up, managerial ties will improve firm performance (Zhang & Zhang, 2006).

Although previous studies have agreed that network ties have been a central factor in improving firm performance, opinions differ on the role of network ties when formal regulative systems have been established. *Guanxi* (network) is considered a cultural characteristic that has strong implications in China for social attitudes and business practices (Park and Luo, 2001). The culture-based network view holds that social networks are embedded within Chinese culture and will be continuously effective in the business sector (Chen, 2001; Yang, 1994, 2002).

The institution-based network view suggests that social networks are an institutionally defined system and that the significance of social networks will decline following China's institutional change to a market economy (Fan, 2002b; Guthrie, 1998). Peng (2003) developed a two-phase model addressing the change from a relationship-based transaction structure to a rule-based regime. He proposed that, in the late phase, the costs of relationship will increase and the benefit from relationships will decline. Firms' strategic choices will evolve following this shift, and the strong-tie-based networks will be phased out.

Over 30 years after the start of its reform, China now has a more formalized regulative system. Child and Tse (2001) summarized changes in three institutional spheres in China: government, structure of industries and firms, and intermediate institutions. They proposed that "the development in China of legal support for the terms of contracts and of transparency in legal and accounting processes will encourage a shift from personal to impersonal enforcement of business transactions" (Child & Tse, 2001, p.14). Ralston, Terpstra-Tong, Terpstra, & Ergi (2006) chronologically listed the major institutional evolutions of China over a decade. Those changes included the recognition of private firms as an essential component of the economy in 1997, incorporation of private ownership into the Chinese Constitution in 1999, and the legalization of private assets and capital by China's constitution in 2004. Tan (2007) compared

the organizational environment in China at a 12-year interval and found that the environment in phase two was characterized by reduced turbulence and reduced complexity. The institution-based network view suggested that managers' network ties would not function under a well-established institutional system. In other words, the relationships between managers' strong ties/weak ties and firm performance would not be significant in China.

Peng & Zhou (2005) proposed an intermediate phase between the two phases of institutional status. They argued that the evolution from no institutions to well-established institutions is a long-term process. In the middle range between the two opposite statuses, when institutions have been partially developed but are not well-established, firms will resort to weak ties for institutional support. That is to say, during the intermediated phase, managers' weak ties will be positively related to firm performance but strong ties will not. Liu, Huang, and Hsu (2010a) found that new firms follow a general pattern when acquiring intangible resources: they start by using a mixture of strong and weak ties, then shift to strong ties and finally to no ties. By examining the effectiveness of managers' strong ties and weak ties in today's institutional environment, the results can shed light on these different views.

Hypothesis 2a: Managers' strong ties are positively related to firm performance in China.

Hypothesis 2b: Managers' weak ties are positively related to firm performance in China.

The Effects of Strong / Weak Ties for Firms of Different Ownership Types

Conflicting results in previous studies as to whether strong ties are more important than weak ties created a central dilemma for network research (Granovetter, 1973, 1974; Bruderl & Preisendorfer, 1998; Hite & Hesterly, 2001; Jack, Dodd, & Anderson, 2008). Granovetter (1973) found that weak ties played more important roles in getting information. Because a weak tie often constitutes a local bridge to members of different small groups, it is more likely to provide

new information. Bruderl and Preisendorfer (1998) drew a contradictory conclusion that support from strong ties was more important than support from weak ties in the context of entrepreneurship and small business formation. Since most strong ties are likely to be connected and weak ties are not, the dilemma is highly related to the debate on whether networks with structural holes are better than networks with closure (Coleman, 1988, 1990; Burt, 1980a, 1980b, 1992, 2000, 2005).

Recent studies have tried to resolve the contradictions by importing contingent factors (Burt, 2000; Hite & Hesterly, 2001; Elfring & Hulsink, 2003). The contingent factors that may affect the benefits of strong ties versus weak ties include the stage of the firm's development (Starr & Macmillan, 1990), the degree of innovation, i.e., incremental versus radical (Elfring & Hulsink, 2003), the entrepreneurial processes (Elfring & Hulsink, 2003), the organizations' objectives (Adler & Kwon, 2002) and the selection of outcome variables (Bruderl & Priesendorf, 1998; Delmestri, Montanari, & Usai, 2005). For example, Elfring and Hulsink (2003) proposed that business ventures used more weak ties than strong ties to pursue incremental innovation, but that strong ties were more important for firms pursuing radical innovations because strong ties could ensure the exchange of tacit knowledge.

Peng and Luo (2000) demonstrated that the impacts of top managers' network ties on firm performance were stronger for non-state-owned firms than for state-owned firms. Peng (2003) suggested that incumbent firms (mostly state- or collective-owned), entrepreneurial start-ups (mostly private), and foreign entrants used network strategies differently. This study proposes that ownership type is a key contingent factor for the strong tie versus weak tie argument during the entrepreneur process.

The effects of strong ties

Strong ties provide multiple benefits to entrepreneurial firms (Krackhardt, 1992; Uzzi, 1996, 1997). First, during the entrepreneurial process, when new firms are in great need of support, strong ties are more motivated to offer help (Granovetter, 1982; Krackhardt, 1992). Strong ties are more likely to take risks and offer financial resources to new firms when the firms' futures are still undecided (Bruderl & Priesendorf, 1998). Family networks (mostly strong ties) can provide unpaid family work and emotional support to new firms. Examples include those strong ties providing financial support to owners when business is in trouble (Jack, 2005).

Second, strong ties build trust among executives of related firms (Aldrich, 1999; Uzzi, 1996, 1997). Trust promotes access to difficult-to-price resources that are difficult to exchange through arm's-length transactions but enhance the organization's capability. The trust among firm managers will also reduce the cost of designing monitoring devices. The heuristic character of trust can economize on cognitive resources, time, and attention during the decision-making process without affecting the decision quality (Uzzi, 1997). Jack (2005) found that strong ties were used extensively to maintain, extend, and enhance reputation after trust was established.

Third, the constant communication between strong ties will enhance the sharing of fine-grained information (Uzzi, 1997). One benefit of fine-grained information transfer for managers is that it increases "the breadth and ordering of their behavioral options and the accuracy of their long-run forecasts" (Uzzi, 1997, p. 46).

Finally, strong ties inspire collective problem solving (Uzzi, 1996, 1997). Persons involved will voice their complaints and negotiate over them, which advances the detection and solution of problems (Aldrich, 1999). Firms increase learning, discover new opportunities by working through problems together, and get direct feedback from close ties.

In China, the importance of strong ties to businesses was highlighted by the old saying that you had to make friends with each other before doing any business (de Bruijn & Jia, 1993; Yang, 1994). Since most strong business ties are based on mutual interests, both private firms and joint ventures can reap the above-mentioned benefits of strong ties. Strong managerial business ties are ready to provide support when firms need capital and human resources. The mutual trust between managers can improve sharing of fine-grained information and enhance problem solving. This indicates that managers' strong business ties are positively related to firm performance for private firms and joint ventures.

Despite China's moving toward the free market system, the Chinese government remains active (Tjosvold, Peng, Chen, & Su, 2008). Strong political ties can provide firms with government support, such as subsidies, credit guarantees, and tax and loan write-offs (Peng, 2000). This suggests that strong political ties will improve firm performance for private firms and joint ventures.

Hypothesis 3a: Managers' strong ties are positively related to firm performance for private firms.

Hypothesis 3b: Managers' strong ties are positively related to firm performance for joint ventures.

The effects of managers' strong ties on firm performance are complicated for SOEs. Some studies have indicated that the effects of managers' strong ties for SOEs follow a pattern similar to those of private firms and joint ventures (Child & Yuan, 1996; Warren, Dunfee, & Li, 2004). For instance, in China, many managers of SOEs are former officials who had worked in the government or come from parent SOEs managed by government officials (Child, 2001). "Strategic decision making among Chinese SOEs was located within a network of interlocking

relationships comprising administrative bodies, regulatory bureaus, and, in some cases, local governments"(Child & Yuan, 1996, in Peng, 1997, p. 389) This has provided the SOEs easier access to government officials and a longer time to develop strong relationships with government officials (Peng & Luo, 2000). SOEs can win government projects more easily than can other types of firms (Tang, Tang, Zhang, & Li, 2007; Warren *et al*., 2004). Though China's transition from a planned economy toward a market economy has weakened the connections between government officials and managers of SOEs, the historical relationships are very likely to be maintained for a long period of time.

Hypothesis 3c: Managers' strong ties are positively related to firm performance for state-owned firms.

Meanwhile, a social exchange perspective suggested that actors' social networks offered help to the actors with the expectation of pay back in the future (Blau, 1964). In China, some network ties are reciprocity- and equity-based. After getting help from network ties, managers always have to pay back later on (Luo & Chen, 1997). Therefore, too many strong ties may overload a firm with obligations (Gu, Hung, & Tse, 2008). Hypothesis 1a and 1b propose that managers of SOEs have more strong ties than those at other types of firms. The costs of fulfilling obligations to and paying back strong ties may exceed the benefits for SOE managers.

A closer analysis of the strong tie and its relationship to performance for SOEs indicates that the possible negative impacts may be caused mainly by strong political ties. Li and Zhang (2007, p. 795) suggested that SOEs spent more time and money in networking with government officials, because they were beholden to government officials and needed to spend a great deal of effort trying to influence these officials. Networking may help secure the careers of managers, but it may not contribute too much to venture performance. Many SOE managers' strong

connections in the government often know little about business operation but will interfere with firms' major decisions (Lin, Cai, & Li, 1999). Government officials may also refer unqualified friends or family members to work in SOEs and force SOE managers to purchase from officially favored companies, and these activities will be detrimental to firm performance (Liu, Huang, & Hsu, 2011).

In the transitional economy of China, SOEs took advantage of their historical legitimacy and faced soft budgets. Executives of these firms were not highly motivated to improve firm performance (Nee, 1992). Kim, Oh, and Swaminathan (2006) introduced the construct of network inertia and emphasized its constraints on network change. SOE managers face great difficulties when they attempt to dissolve old relationships and form new network ties that are favorable to firm performance because the costs of terminating strong ties are very high. Too much dependence on strong ties creates no room for flexible results and may limit the options of the firms to follow alternative paths (Batjargal, 2003; Podolny & Page, 1998; Uzzi, 1997).

Hypothesis 3d: Managers' strong ties are negatively related to firm performance for state-owned firms.

The effects of weak ties

Weak ties are very important in information diffusion since they often constitute local bridges to disconnected social units and lead to novel information (Burt, 1992; Granovetter, 1973, 1974, 1982, 1983; Ruef, 2002). Jack *et al*. (2004) summarized the issue: a diverse set of weak ties could lead to information, discussion and advice, capital, customer and supplier referral, etc. Burt (1992, p. 2) stated that holes existed in social structure and "competitive advantage is a matter of access to holes." Ruef (2002) tested Granovetter's strength of weak ties thesis with empirical data from over 700 organizational start-ups and concluded that actors relying on weak

ties as sources of ideas were more likely to be innovative than actors relying on strong ties. Weak ties also provide decision makers a set of diverse alternatives from which to make strategic choices (Geletkanycz & Hambrick, 1997). Therefore, weak ties improve entrepreneurs' abilities to spot opportunities because they lead to more varied sets of ideas and routines (Elfring & Hulsink, 2003).

Since it is relatively easier to maintain a weak tie than a strong tie, managers of private firms and joint ventures will benefit from additional weak ties because they will have more diverse information through them and not commit too much time to them (Elfring & Hulsink, 2003). Li (2005) suggested that managerial networks have a positive effect on performance of foreign-invested enterprises in China. Evidence from the transitional economy of Russia has suggested that weak relationships provide greater room for flexible negotiations and may improve firm performance via exploration of opportunities in structural holes (Batjargal, 2003).

A logic similar to that of Hypothesis 3d suggested that managers' weak ties would be negatively related to firm performance for SOEs. In China, the role of asset owners was delegated to state or local government, who were not highly motivated to monitor the growth of the value of state capital assets (Lin *et al*., 1999; Ma, Yao, & Xi, 2006; Mak, 2008), a common phenomenon suggested by agency theory. The developmental history of the Chinese economy during the past 30 years has shown that managers of the more established SOEs have to spend much time on maintaining political ties (both strong and weak ties) that are important to their income and promotion, because the government has controlled SOEs by appointing top managers of these firms (Peng & Luo, 2000). Li and Zhang (2007) suggest that SOEs have or spend more time and money in networking with government officials, because they are beholden to government officials and need to spend a great deal of effort trying to influence these officials.

Taking up many firm resources, these networking activities may help to secure the positions of the general managers, but they do not benefit the firms.

Hypothesis 4a: Managers' weak ties are positively related to firm performance for private firms.

Hypothesis 4b: Managers' weak ties are positively related to firm performance for joint ventures.

Hypothesis 4c: Managers' weak ties are negatively related to firm performance for state-owned firms.

Strong Ties Versus Weak Ties

Peng and Zhou (2005) propose that strong ties are more important than weak ties when emerging countries are under a planning-based system. As the institutions move toward a market-based system, the importance of strong ties will decrease and that of weak ties will increase. This study proposes that ownership type is still a moderating factor now. In other words, the effects of strong versus weak ties will differ for SOEs, private firms, and joint ventures (see Table 1).

Table 1 Summary of Subgroup Hypotheses: Effects of Strong Ties vs. Weak Ties

Effects of	State-owned	Private	Joint Venture
Strong ties	+/-	++	++
Weak ties	-	+	+

Private firms and joint ventures

The previous section indicated that, for private firms and joint ventures, both strong and weak ties would positively affect firm performance. Nevertheless, the extent to which different types of ties affect performance may differ. Actors linked by strong ties are more willing to offer help, especially during entrepreneurial processes where the return from the contribution is still

uncertain (Krackhardt, 1992) and during critical events when there may be risks involved in helping the managers. In other words, private firms and joint ventures will benefit more from strong ties than from weak ties.

Taking political ties as an example, one important reason for the stronger effectiveness of strong ties for private firms and joint ventures is the risk to officials for offering help to firms other than SOEs. The motivations for offering help to private firms or joint ventures, as opposed to SOEs, which are part of the state-owned system, are always suspicious to officials' peers or supervisors and can draw the attention of auditing and supervisory departments. Therefore, it will be comparatively harder to obtain support from weak political ties than from strong political ties. In this situation, relying on strong political ties becomes a more rational choice for such firms.

Hypothesis 5a: The positive relationship between managers' strong ties and firm performance is greater than that between managers' weak ties and firm performance for private firms.

Hypothesis 5b: The positive relationship between managers' strong ties and firm performance is greater than that between managers' weak ties and firm performance for joint ventures.

State-owned firms

Discussions in the previous sections revealed that, for SOEs, weak ties should have negative effects on firm performance, while strong ties could have either positive or negative effects on firm performance. That is, if Hypotheses 3c and 4c are correct, then managers' strong ties will be more important than weak ties in improving firm performance, because strong ties are positively related to firm performance while weak ties are negatively related to firm

performance. Liu, Huang, and Hsu (2010b) found that general managers of SOEs who weigh strong ties and weak ties differently both thought that strong ties were more important than weak ties. One of them said that, in China's current complicated environment, acquaintances are not as reliable as friends; the other obtained many new ideas on corporate strategy from a friend.

However, if Hypotheses 3d and 4c are correct, both strong ties and weak ties will be detrimental to firm performance for SOEs. Strong ties may bring many benefits to the firm, but it is very time-consuming to develop and maintain strong ties. Spending too much time on strong ties, managers may lack time and energy to improve market compatibility (Peng & Luo, 2000). As noted earlier, excessive dependence on strong ties leaves no room for flexiblity and may limit options for alternative paths (Batjargal, 2003). For managers of SOEs, even weak ties are sticky and cannot be manipulated at will. The reason is that many of their weak ties are weak political ties that can affect their careers and many historical and bureaucratic factors are involved in weak business ties.

Managers' Perception of the Importance of Different Network Ties

Based on discussions in previous sections, the author proposes that the effects of managers' network ties will differ among firms of different ownership types. Economy hotel managers from SOEs, private firms, and joint ventures will rank the importance of strong political ties, weak political ties, strong business ties, and weak business ties differently. For example, Hypothesis 5b suggested that managers' strong ties are more important for joint ventures. Hence, managers of joint ventures should rank strong ties higher than weak ties.

Hypothesis 6: The ranking of managers' network ties will be significantly different for firms of different ownership types.

Other Factors Shaping New Firm Performance

Cooper (1995) summarized four sets of variables that may influence new firm performance. They are: entrepreneurs' characteristics, initial firm attributes, founding processes, and environmental conditions.

Entrepreneurs' characteristics are important factors that can influence new firm performance (Cooper, 1995). Studies have found a positive relationship between managers' functional experience and firm performance. (Li & Zhang, 2007; McGee, Dowling, & Megginson, 1995). Owners'/managers' experiences could also affect the survival rate of new firms (Praag, 2003).The major reason is that managers' experience in certain areas may give them expertise and skills that will help their firms develop new technologies more efficiently than other firms (Li & Zhang, 2007). Brockhaus and Horwitz (1986) found that education became more and more important with the growth of high technology and heavy competition. Therefore, it is also necessary to control for the education level of managers.

Firm size is an attribute that may affect firm performance (Chung & Kalnins, 2001; Claver-Cortes *et al*., 2007; Wu, Wang, Chen, &Pan, 2008; Xin & Pearce, 1996) since large firms tend to have higher revenue than smaller ones. Even though using RevPAR takes the size of a hotel into consideration, larger hotels usually charge higher prices per room because they have more features (Chung & Kalnins, 2001). The revenue growth will not be proportional to the increase in the number of rooms due to economies of scale (e.g., the overhead of the hotel could be spread across more units).

Firm age, another firm attribute, could also be used to control for the founding process of a new firm (Cooper, 1995; Praag, 2003). At the very beginning, this study noted the liability of newness for entrepreneurial firms (Autio *et al*., 2005; Fernhaber & McDougall, 2005; Xin &

Pearce, 1996). Since younger firms need time to establish a stable customer base, firm age can affect a hotel's occupancy rates as well as prices.

Many studies have suggested that affiliation with a chain can increase the survival rate or revenue of a hotel because of knowledge transfer and economy of scale (Canina *et al*., 2005; Chung & Kalnins, 2001; Ingram & Baum, 1997). The field trip experience also suggested that network tie patterns differ among hotel chains of different sizes.

The operation model of a hotel influences its strategic choices (Short, 2003) and may affect its performance (Chiang, Tsai, & Wang, 2004). Dev and Brown (1990) suggested that a hotel's efficiency was affected by the interaction of its operation model (vertical structure), strategies, and task environment. Hotel chains care more about their owned/leased properties than about managed/franchised ones because they can pocket the residuals of the income. Examples are not rare in which hotel and food chains tend to operate units that can earn more money and franchise those located on relatively unattractive sites.

The location of a hotel determines its environmental conditions and can significantly affect its performance (Enz, Canina, & Liu, 2008; Canina *et al*., 2005; Molina-Azorin, Pereira-Moliner, & Claver-Cortes, 2010). As the demand for lodging in urban regions is higher than that in rural regions and customers have easier access to hotels located on major traffic routes than those on side roads, hotels with better locations will have competitive advantages.

Baum *et al*. (2000) suggested that the initial firm performance could be influenced by ownership. Studies on other transitional economies such as Slovenia have suggested that ownership structure is a key competitiveness factor for hotels (Mihalic & Cvelbar, 2008). Douma, George, and Kabir (2006) have proposed that the effects of ownership on firm performance differ in emerging economies. Zou and Adams (2008) have shown that certain types of

ownership will affect stock returns in China. One important reason is that state ownership has led to agency conflicts due to state agencies' lack of incentives to maximize the value of companies (Le & O'Brien, 2010; Zou & Adams, 2008). Ownership types were also used as moderating factors that could affect the impacts of managerial ties on firm performance.

In the next chapter, the research design of the present study will be introduced. This is composed of the sampling and data collection method, the measurements for variables, and the methods for data analysis.

CHAPTER THREE

METHODOLOGY

This chapter starts with a description of rationales for using survey research. After introducing the research setting, the economy hotel industry in China, the author describes the sampling and data collection method. The definitions of and the ways to measure dependent, independent, control, and instrument variables are explained in detail. The chapter ends with an account of different data analysis methods, such as MANOVA, multiple regression, ordinal logistic regression, and Chi-square test.

The Use of Survey Research

Strategies of inquiry related to quantitative research such as surveys call forth perspectives that reflect "a deterministic philosophy in which causes probably determine effects or outcomes" (Creswell, 2003, p.7). The selection of research method is shaped by three conditions: (1) the form of research question, (2) the extent of control of behavioral events, and (3) the degree of focus on contemporary events (Yin, 2003). The investigator in this study is interested in contemporary events over which he has no or limited control, and he plans to address research questions focused mainly on who and how much, a survey method is an appropriate choice. The study of managers' network ties and networking behaviors calls for survey research to collect first-hand data because there is no available data set of information on the relevant variables.

Researchers have been concerned about the validity of applying Western-developed management theories in China and have suggested that adjustments are necessary to develop those theories in the new environment (Shenkar & von Glinow, 1994). Survey research is a legitimate and popular way to collect data on managerial ties (Peng & Luo, 2000; Li & Zhang,

2007), but undertaking survey studies on managerial issues in China faces some constraints (Roy, Walters, & Luk, 2001). For example, to obtain nationwide probability samples is difficult under certain conditions, and some secondary data published by the government are inaccurate and obsolete (Manion, 1994; Roy *et al*., 2001). This study will address those research design questions specific to China with methods offered by previous cross-cultural studies (e.g., Shenkar & von Glinow, 1994; Manion, 1994).

Sampling and Data Collection

The research was conducted in mainland China, the world's most populous nation and one of the world's fastest growing economies. A report published by the National Bureau of Statistics of China (NBSC) showed that the annual growth rate of China's Gross Domestic Product (GDP) was 10.3% in 2010 (National Bureau of Statistics of China, 2011); China has surpassed Japan as the world's No. 2 economy in terms of GDP. China plays an increasingly important role in the world tourism market. Inbound tourist arrivals in China in 2010 were 133.76 million, representing a 5.8% growth over the previous year (National Bureau of Statistics of China, 2011). China has become the world third-largest tourism destination, overtaking Spain in 2010. The World Tourism Organization (UNWTO) expects that China will become the world's largest tourism destination by 2015 (Tan & Shi, 2011). The growing importance of China in the world economy has improved the value of knowing the competitive dynamics in China because Western firms can learn how to compete and/or collaborate with firms there (Child & Tse, 2001; Peng *et al*., 2004).

The transitional economy of China provides an ideal context for investigating the effect of ownership type due to its richness of ownership structures, whereby state-owned, private, joint venture, and exclusively foreign-owned firms coexist and compete (Peng, 2003; Tan, 2002; Zou

and Adams, 2008). China is also a transitional economy with an ever-changing institutional environment. Informal institutional constraints such as interpersonal ties may play more important roles in facilitating economic exchange where formal institutional constraints are weak (Peng & Luo, 2000). For years, China has had a relationship-based business society (Chen, 2001). The Chinese term *guanxi*, used earlier as roughly equivalent to the English word *network*, is "one of the most popular terms used to describe social relations among the Chinese people, the functioning of Chinese society, and the operations of Chinese entrepreneurs and entrepreneurship" (Lin, 2001a, p. 153).

The current study will focus on China's economy hotel sector, which, like other good-enough market segments (targeting the Chinese middle class), has caught the attention of both domestic and international firms due to its strong growth (Dai & Shu, 2007; Gadiesh, Leung, & Vestring, 2007). The traditional hotel statistics of the China National Tourism Administration (CNTA) have not covered all the economy hotels in China. The China Economy Hotel Survey, an official survey conducted annually by the China Hotel Association (CHA), showed that there were more than 4,000 economy hotels with about 400,000 rooms in China by the end of 2008. The Chinese Economy Hotel Network, a commercial website, has recently created another economy hotel chain list. Samples of economy hotels affiliated with hotel chains were chosen from these two population lists.

Currently, a list of independent economy hotels does not exist; the closest substitute is a list of all two-star hotels in China included in the China Star-rated Hotel Guide published by China Tourist Hotels Association (CTHA). However, the Guide does not have information on when these hotels were opened and the general manager's personal contact information is not included. Responses from a few economy hotel general managers in 2010, when the author

tested the first draft of the on-line survey questionnaire, suggested that most of these managers would not respond to email messages or cold calls intended to collect hotel performance data and their personal networking information. Without being referred by chain-level executives or government or trade association officials, the author had tried to visit some economy hotels in person but did not get a chance to meet with those general managers.

The independent samples of this study came from two major sources. Through the support of an officer working in a city tourism bureau, the link to the on-line survey questionnaires were forwarded to general managers of all two-star hotels in a coastal city of Shandong Province. Among the population of 33 general managers, 28 filled out at least part of the survey. Many of them only provided partial information and a few of their firms are not new as defined by this study. Nine valid independent economy hotel samples from this group were included in the final analysis. The other source of independent samples is an economy hotel general manager training program initiated by Inntie Company, China's most well-known independent economy hotel consulting firm. Twelve informants submitted hard copy questionnaires delivered by the sponsor of the training course, and seven valid questionnaires were included in the final analysis.

There are multiple standards for defining "entrepreneurial or new firms": some have defined these as firms that are six years old or younger (Brush, 1995; Brush & Vanderwerf, 1992; Zahra, Ireland, & Hitt, 2000); others have used eight years (Li & Zhang, 2007; McDougall, 1989; Zara, 1996; Zhang & Li, 2010), 10 years (Yli-Renko, Autio, & Sapienza, 2001) or 12 years as the cut-off age (Covin, Slevin, & Covin, 1990). This study chooses economy hotels that are eight years old or younger. Most of the economy hotels in China have been founded in the past eight years and are still in their entrepreneurial process.

The units of analysis are individual hotels and their managers. The selection of managers as informants is based on two factors: first, they are the ones who have access to the hotel performance data; second, the top executives are the ones whose network ties are more valuable for obtaining strategic resources for firms (Simonin, 1997). Data were collected from multiple sources. Before beginning the survey research, the researcher had collected background information about the economy hotels and the managers through documents and records. The three major sources are the report of the China Economy Hotel Survey (CHA, 2006-2009), the book *Economy Hotels* (Dai & Shu, 2007), and the Chinese Economy Hotel Network website.

One major objective of this study is to compare how managers from hotels of different ownership types use network ties. To ensure a sufficient number of samples for each type of hotel, the author used a cluster sampling method to select economy hotel chains from each ownership category and used a certain number of hotels from among the selected hotel chains.

During the two field trips conducted in 2009 and 2010-2011, the author contacted over 40 economy hotel chains and met with many chain-level top executives face to face to discuss their participation in the survey research. The names of these chains are listed in Table 2. They include 12 SOEs, 17 private firms, 11 joint ventures, and four exclusively foreign-owned economy hotel chains. This covers all top ten economy hotel chains in China in terms of the number of hotels.

Table 2 List of Economy Hotel Chains Contacted

Domestic		Foreign	
SOE	**Private**	**Joint Venture**	**Exclusively Foreign-owned**
Shindom	Sun Moon Hotel	Home-Inn	Holiday Inn Express
City Inn	Jialihua Guesthouse	Motel 168	Ibis
Garden Inn	Piao Home Inn	China's Best Value Inn	Green Tree Inn
Huantian Inn	Weibo Inn	Orange Hotel	My Inn
Kaiserdom Hotel	Nanyuan Inn	7 Days Inn	
Donghang Star	We Hotel We Home	Vienna Hotel	
Zhongzhou Express	Jintian Hotel	Super 169 Inn	
JJ Inn	Yart Inn	Starway Hotel	
Easy Inn	Jitai Hotels	Hanting Inns and Hotels	
Shanshui Hotel*	High Fond Motel	Thank Hotel	
Zhong An Hotel*	Home Club Hotel	Pod Inn	
Hualijiahe Hotel*	Sunny Sky Hotel		
	Izunco Inn		
	Weilai Enjoy Home		
	99 Inn		
	Long Fu Gong Hotels*		
	Jinshi100 Hotel*		

Note: Hotels marked with a * are the ones from which the author did not get any feedback.

Table 3 The 35 Economy Hotel Chains Participating in the Research

Domestic		Foreign	
SOE	**Private**	**Joint Venture**	**Exclusively Foreign-owned**
City Home	3B Inn	7 Days Inn	Holiday Inn Express
Easy Inn	99 Inn	China's Best Value Inn	Ibis
Eaka365	City Comfort Inn	Hanting Inns and Hotels	My Inn
Garden Inn	Dashing Hotel	Home-Inn	Super 8
Huantian Inn	Home Club Hotel	Motel 168	
Kaiserdom Hotel	Jiali Inn	Pod Inn	
Shindom	Kunlunleju Business Hotel	Super 169 Inn	
	Morning Inn	Vienna Hotel	
	Nanyuan Inn		
	Piao Home Inn		
	Sun Moon Hotel		
	Sunny Sky Hotel		
	Weilai Enjoy Home		
	WHWH		
	You Home Inn		
	Youth Sunny Express		

Note a: Property-level general managers from ten economy hotel chains participated in the study by themselves, without participation being arranged through their chain-level executives.

b: The chain-level ownership types are not identical to property-level ownership types.

The author did not get any response from five of the economy hotel chains. A few of these economy hotel chains were uncomfortable about revealing operational data and refused to participate in the survey study. Top executives of four economy hotel chains promised to participate in the study but failed to submit their responses after being contacted by the author

many times. A total number of 35 economy hotel chains participated in the final survey research (Table 3).

Among the 35 economy hotel chains that participated in the final survey research, some small and medium scale chains (My Inn, Shindom, Garden Inn, Piao Home Inn, and Nanyuan Inn), successfully arranged for all their qualified hotel managers to fill the survey. Some large economy hotel chains, such as Home Inn and Hanting Inns and Hotels, randomly selected a regional market and some hotel managers from that region. For example, Hanting Inns and Hotels selected a northern city market and sent survey links to 32 property-level managers. Twenty-nine of these managers submitted survey responses. Due to the rapid growth of economy hotel chains in China, property-level general managers are constantly being assigned to newly founded hotels. Hotel chains such as 7 Days Inn forwarded the survey questionnaires to all their qualified managers who had served as general managers at the same properties during the year of 2009, and 42 of them submitted their responses. Two hotel chains, Motel 168 and Super 8, picked a group of property-level general managers who happened to be attending a training class at their headquarters or regional headquarters.

A key part of the data collection is a questionnaire survey. The questionnaire is composed of 33 major items divided into four major sections. The first part is questions on the background of the economy hotels and the general managers, such as when the hotel was opened, the location, operation model, and ownership type of the hotel, and the work experience and educational attainment of the general managers. The second section is about hotel performance measures, such as the total revenue, number of rooms sold, net profit of the hotel in 2009, and the perceived performance of the hotel compared to its competitors on service quality, guest satisfaction, occupancy rate, room rate, and gross profit. The third part collects data on general managers'

network patterns. Questions on the numbers of different network ties, the extent to which they use network ties, and how they rank different types of network ties are listed in this section. The final section concerns the demographic information of informants (see appendices 1 and 2 for complete copies of the survey instruments).

Following the suggestions of Converse and Presser (1986) and Visser, Krosnick, and Lavrakas (2000), a field visit was conducted to develop the instrument. Some of the questions in this questionnaire were used for qualitative research interviews of chain-level executives. Three managers drawn from the target population were asked to complete an earlier draft of the questionnaire and respondents then answered questions on the clarity of the survey questions, question order, question wording, and their interpretation of the questions. Adjustments have been made based on the comments from these informants.

The questionnaire was written in English and then translated into Chinese by the author. Lack of semantic equivalence across languages, lack of conceptual equivalence, and lack of normative equivalence across societies are three practical problems that threaten research validity when translating questionnaires (Behling & Law, 2000). The back translation technique suggested by Harpaz (1996) and Behling and Law (2000) was used to ensure the concept equivalence of the questions in the two languages. An academic researcher who had conducted managerial tie-related studies translated the Chinese version of the instrument back into English without reading the original English version. The comparison showed consistency of the two versions of the questionnaires. The Chinese version was used for SOEs and private firms. Both the Chinese and the English version were sent to joint ventures and exclusively foreign-owned firms.

The online survey method was used for data collection. The questionnaire was posted on-line and the links to the survey websites were emailed to chain-level executives and then forwarded to general managers of chain-affiliated economy hotels. As introduced earlier, the two groups of independent informants were reached through a facilitator working in a local tourism bureau and the CEO of an economy hotel consulting firm who had initiated an economy hotel general manager training program. The primary challenge in using the electronic survey is the coverage error or the representativeness of the research sample (Simsek, Veiga, Lubatkin, & Dino, 2005). If a large percentage of the population does not use internet, the results of the study could be biased. The preliminary field visit showed that almost all economy hotels in China offered free internet access to its customers and general managers had access to the internet too.

The top executives/facilitators of many economy hotel chains forwarded the email addresses of the general managers to the researcher when sending out the note asking those managers to participate in the research. The researcher exchanged two to five rounds of emails with the facilitators to follow up on the survey responses. Afterwards, courtesy notices were sent to those who did not finish the on-line survey in two weeks. Whenever possible, the investigator and a research assistant called managers in person or sent text messages to collect information.

PDF versions of the questionnaire were mailed to those uncomfortable with filling out an online survey. Eighty-three informants printed out the questionnaire, filled it out by hand, and mailed it back to the researcher. To improve the response rate, the author had tried to get endorsements from relevant professional or trade associations in order to claim in the cover letter that this research was supported by them, something recommended in Bartholomew and Smith (2006). However, all relevant organizations (China Hotel Association and the China Tourism

Hotel Association) considered it inappropriate to sponsor a personal dissertation study and did not provide an endorsement.

The researcher ordered as incentives 400 pens packed in independent packages with "School of Hotel Administration, Cornell University" printed on them. Informants could choose to receive this Cornell University souvenir or enter a lottery of offering ¥1,000 in cash (one winner for every 30 participants). About 80 informants chose the lottery option and the others selected the souvenir option. All souvenirs were mailed to the addresses provided by the informants. Using a random number generator, three general managers from Home Inn, 7 Days Inn, and Hanting Inns and Hotels were selected from the list of informants who chose the cash lottery option, and delivery of the cash awards of ¥1,000 was arranged after confirmation of their contact information.

Milton (1986) offered a sample size formula for multiple regression studies: $n=k+1+[t^2(1-R^2)]/\Delta r^2$ where k is the number of variables in the model, R^2 is the anticipated overall R^2 estimated from previous similar study results, and Δr^2 is the minimum addition to r-square. The priori sample size calculator for multiple regression based on theories in Cohen (1988) and Cohen, Cohen, West, & Aiken (2003) requires a minimum sample size of 207 with an Alpha level of 0.05, a desired statistical power level of 0.8, an anticipated effect size of 0.11, and 20 predictors. The final samples meeting all the selection criteria were 230 in all, which surpassed the baseline required by the sample size formula.

Multiple measures were taken to ensure the conformation to certain ethical norms. Survey Monkey, a legitimate on-line survey website approved by the Cornell Institutional Review Board (IRB), was used to collect data. The informants were told that the participation was voluntary and they had the right to skip any question that they felt uncomfortable about

answering. To preserve confidentiality, the survey results were only accessible to the researcher himself. The hard copies of questionnaires were kept in a locked document cabinet in an office only accessible to people with digital keys. The final results were presented without revealing individuals' identities. All participants were asked to read and sign a consent form which introduced the purpose of the study, the informant workload, the risks and benefits, and the compensation. Informants were able to gain access to the questionnaire only after they signed the consent form. The contact information of Cornell IRB was also provided on the consent form in case informants had additional questions about the research.

In addition to the survey, further information was collected through archival documents, in-depth interviews of top executives of economy hotel chains, discussion with leading Chinese researchers in the hospitality and tourism field, and participant observation of over 30 economy hotels in China. The author read over a dozen books on entrepreneurs of economy hotel chains in China, examined the China Economy Hotel Survey 2006-2009 published by the China Hotels Association, and visited over 50 economy hotel chain websites frequently to monitor the evolution of the industry. The author also stayed at economy hotels of 20 different brands belonging to the participating hotel chains, and collected information on facilities, prices, and services provided by economy hotel chains. Whenever possible, the author talked with hotel customers and front office staff to collect more information from different perspectives. By visiting several economy hotels in a cluster, the author was able to compare the service quality and competition among economy hotels affiliated with different hotel chains.

To make arrangements for the survey research, the author met with 20 chain-level executives during the 2009 preliminary field visit and 34 executives during the 2010-2011 visit (ten of them were met twice). Information about their opinions on the effects of network ties and

how they had used their network ties was collected. Many stories and cases related to the central theme of the survey study were introduced by the executives. Those cases appear in the discussion section of the results of this survey study.

Variables and Measurements

Dependent variable

The discussion in the previous section suggests using multiple performance measurements. Both objective and subjective performance measurements have been used in this study.

- Occupancy rate

Occupancy rate is calculated by dividing rooms sold by the number of rooms available. It is among the most popular performance measures in the hotel industry, because it enables "the identification of trends and fluctuations within the industry" and provides "a sensitive barometer of the fluctuating fortunes of individual hotels" (Jeffrey & Barden, 2000, p. 383). Occupancy rate is not always positively related to financial performance, but with no room rate data available, it is still a reliable monitoring measure that can be applied to different hotel types. Occupancy rate has been used to monitor hotel performance, reflect the result of the interaction between the demand for and supply of hotel accommodation, and analyze seasonality (Jeffrey & Hubbard, 1988; Jeffrey & Barden, 2000, 2001; Koenig & Bischoff, 2004).

Managers can obtain business through both political and business ties. Therefore, the hotels whose managers are better connected may benefit from managers' network ties and earn a higher occupancy rate. Good relationships with government officials can help hotels to maintain daily operation without being bothered by frequent inspections from the government.

- RevPAR

RevPAR, revenue per available room, is equal to the room revenue divided by the number of rooms available. Another formula for calculating RevPAR is multiplication of the average daily rate (ADR) by the occupancy rate. ADR is the room revenue earned divided by the number of rooms sold. The occupancy rate is the percentage of all rooms occupied or rented at a given time. This study collected data on the revenue of individual hotels in the year 2009 and rooms available in the same year and then calculated the RevPARs of each hotel.

Because some managerial ties, such as ties with customers, will enhance firm performance by increasing both the price and the occupancy rate of a hotel, the demand-based RevPAR seems to be another good choice for measuring hotel performance. Another good example is ties with government officials, which will ensure the normal daily operation of a hotel (Liu *et al*., 2011) and help in avoiding penalties such as *ting ye zheng dun* (closed while brought up to service standard) and therefore increase firm revenue.

- ROA (Return on assets)

The ROA is equal to the net operating profits divided by the start-of-year assets. Informants were asked to provide data on the net operating profits (NOP) of the hotel and the start-of-year assets (Assets) of the hotel in 2009.

Many of the advantages of managerial ties are related to reducing costs and improving profitability. For example, ties with suppliers will reduce the costs of operating a hotel. Political ties can reduce costs, too. Hotels can avoid being fined if they maintain good relationships with the local government (Liu *et al*., 2011). The current study has tried to collect firm performance data on ROA following previous studies on similar topics (Li *et al*., 2008).

- Subjective performance measurement

When actual performance data are not available, especially with privately-held firms, subjective performance measurements provide close substitutes (Dess & Robinson, 1984). Subjective measures proved to be reliable and valid and were valuable for measuring broader and nonfinancial dimensions of performance (Dess & Robinson, 1984). Stam and Elfring (2008) have used both subjective and objective measures to capture the multidimensionality of new venture performance. Similarly, perceived performance, composed of perceptual performance and evaluative performance, has been widely used in satisfaction research (Spreng, 1999). Perceived performance measures have also been used by many studies in the tourism and hospitality field (e.g., Baloglu & Love, 2003; Severt, Wang, Chen, & Breiter, 2007).

This study used managers' self-reported measures of five performance dimensions relative to competitors. Informants were asked to evaluate their hotels' performance compared to their competitors on service quality (Pservice), guest satisfaction rating (Psatis), occupancy (Poccupancy), average room rate (Prate), and gross operating profit (Pprofit) in 2009. The scales are from one to seven, with one standing for the worst, two for much worse, three for worse, four representing equal or the same, five for better, six for much better, and seven for the best.

Independent variables

As mentioned before, the current study defines strong ties as ties with friends and weak ties as ties with acquaintances. Friends are those with whom one has both reciprocal and altruistic relationships and acquaintances are those with whom one only has reciprocal relationships. In general, the emotional intensity between one and one's friends is higher than that between one and one's acquaintances. Wang and Liu (2002) explains that friendship is the result of free choice, while acquaintanceship is not. Friends are selected from the pool of

acquaintances, and trust levels are higher between friends. Yang (1994) has suggested that the key difference between friends and acquaintances is whether the relationships are dominated by emotional commitment or gain-and-loss calculation. The distinctions between friends and acquaintances are summarized in Table 4.

Table 4 Comparing Friends and Acquaintances

Category	Friends	Acquaintances
Emotional intensity	High	Low
Dominant relationship	Emotional commitment	Gain-and-loss calculation
Trust level	High	Low
Formation process	Free choice	Not always free choice
Relationship	Both reciprocal and altruistic	Only reciprocal

Two sets of variables were used to measure managerial ties. The first set of variables involves "number of ties" used in a way similar to the use in Batjargal (2003).

- Number of strong ties (NST). The sum of the number of strong political ties and the number of strong business ties.

  Number of strong political ties (NSPT). The number of strong political ties is the sum of ties with government officials who are managers' friends. Government officials include political leaders in the government, officials in industrial bureaus, in regulatory and supporting organizations such as tax bureaus, state banks, and commercial administration bureaus, and officials in trade associations.

  Number of strong business ties (NSBT). This refers to the sum of ties with top managers at buyer firms, supplier firms, and competitor firms who are managers' friends.

- Number of weak ties (NWT). The sum of the number of weak political ties and the number of weak business ties.

  Number of weak political ties (NWPT). This refers to the sum of ties with government officials who are managers' acquaintances.

  Number of weak business ties (NWBT). This is the sum of ties with top managers at buyer firms, supplier firms, and competitor firms who are managers' acquaintances.

The preliminary field visit indicated that some managers had trouble giving the exact number of different types of managerial ties. Therefore, this survey also collected data for a second set of variables: the extent to which managers utilized network ties. It combines the measurement used by Batjargal (2003) with measurement used by Peng and Luo (2000), Li *et al*. (2008), and Li, Zhou, and Shao (2009).

- The use of strong ties (UST). This refers to the extent to which managers utilize ties with government officials and top managers of related firms who are their friends. It was measured by two items, "the use of strong political ties (USPT)" and "the use of strong business ties (USBT) ." Seven-point Likert item measurement was applied for both items. Informants were asked to weigh the use of network ties, from "very little (with a value of 1)" to "very extensive (with a value of 7)." The two items were combined for the measurement "the use of strong ties."
- The use of weak ties (UWT). This refers to the extent to which managers utilize ties with government officials and top managers of related firms who are their acquaintances. It was similarly composed of two items, "the use of weak political ties (UWPT)" and "the use of weak business ties (UWBT)."

Two questions were added to collect more information on managers' perceptions of network ties and the major functions of managers' network ties. One concerned the percentage of network ties used for acquiring financial and physical capital, acquiring human capital and knowledge, obtaining more businesses, and obtaining licenses and certificates or passing routine inspection. The other question asked informants to rank the four types of ties (SPT, SBT, WPT, and WBT) in terms of their importance for improving firm performance.

For the model, ownership type was a moderating factor, as discussed in the literature section. Three dummy variables were created to represent the four types of economy hotels with exclusively foreign-owned firms as the baseline. These three dummies are: state-owned firms (SOE), private firms (Private) and joint ventures (Jventure). The effects of managerial ties on the different types of firms can be assessed by testing the interaction between ownership type and managerial ties. Ownership type was also a control variable since the literature suggests that initial firm performance differs by ownership type (e.g., Baum *et al*, 2000).

Instrument variables

Basically, instrument variables should be correlated with independent variables but not with dependent variables other than through independent variables. Two instrument variables were created to solve the possible reverse causality problem.

- Number of close family members in the industry (NFM)

This refers to the number of close family members (parents, spouse, siblings, and children) in the hotel industry before the manager started to work in the current position. NFM should be positively related to both strong ties and weak ties. The major reason is that close family members are willing to share their networks with economy hotel managers and increase

managers' connections with those in the hotel industry. The value of NFM is not affected by the firm's current performance.

- Use of social media (USM)

Managers were asked to select a few social media that they frequently use: MSN messenger, Skype, QQ, Facebook, Linkedin, Twitter, Blog, Xiaonei, Kaixin, Youtube, and Youku. The variable was measured by counting the types of social media used by a manager.

Control variables

- This study used a manager's educational level as a control variable for entrepreneurs' characteristics. Five levels were specified: lower than high school diploma, high school diploma (HSchool), some college or associate degree (Associate), bachelor's degree (BD), and graduate degree (GD). Two more numerical variables were added to control for managers' functional experience: a manager's business experience (MWE), measured by number of years in business, and a manager's hotel business experience (MHWE), measured by number of years in the hotel business.
- Firm size. This research used the number of rooms (numberofrooms) to control for the effects of firm size.
- Firm age (Age). This study used number of years since opening to control for the effects of firm age.
- Chain affiliation. In this study, hotels were classified as independent, owned by a hotel chain (Owned), or managed/franchised by a hotel chain (Mannfran).
- Location. Dummy variables were created for urban (Urban) and suburban locations, on locations on major traffic routes (Major route) and side roads, and hotels in large cities (large city) and small cities.

- Ownership type. Categorical variables were created to represent firms of different ownership types.

Data Analysis

Hypothesis 1. The analysis of variance (ANOVA) model is a commonly used technique to compare mean values of more than two groups. Since this study compared the numbers of four types of managerial ties among the different groups, multivariate analysis of variance (MANOVA) was used to run the test. Where a comparison of two specific groups was the research focus, a contrast code was added to conduct a t-test between the interested groups since it was more sensitive to pair-wise differences.

Hypotheses 2: multiple linear regressions with dummy variables and ordinal least squares regression

$$Y=a+b_1*X_1+b_2*X_2+b_3*X_1*X_2+b_4*X_3$$

where Y is the performance variable, X_1 is the use of network ties, X_2 is ownership type, and X_3 is all the control variables treated as a unit. For example, if we use occupancy rate to measure performance and the use of network ties to measure managerial ties, the formula before entering the interaction items will be:

Occupancy rate=a+ b_1*UST+b_2*UWT+b_3*SOE +b_4*Private +b_5*Jventure + b_6* HSchool +b_7*Associate +b_8* BD +b_9* GD +b_{10}* MWE +b_{11}* MHWE +b_{12}*numberofrooms +b_{13}* Age +b_{14}* Owned +b_{15} * Mannfran + b_{16}* Urban +b_{17}* Major route + b_{18}* Large city

Treating subjective performance measurements as categorical data, ordinal logistic regression was used to test the significance of managers' strong ties and weak ties. To control for

the chain-level unobservable heterogeneities, the results of a fixed effects model were compared with those of an OLS model.

Hypotheses 3-5: subgroup analysis with multiple linear regressions

Given SOEs as an example, if we use occupancy rate to measure performance and use of network ties to measure managerial ties, the formula is:

Occupancy rate=a+ b_1*UST+b_2*UWT+b_3* HSchool +b_4* Associate +b_5* GD + b_6* BD +b_7* MWE +b_8* MHWE +b_9* Numberofrooms +b_{10}* Age +b_{11} * Owned +b_{12}* Mannfran +b_{13}* Urban +b_{14}* Major route +b_{15}* Large city

If the instrument variables are valid, a two-stage least-squares (2SLS) method can be used to estimate the model and results can be compared with the Ordinary Least Squares (OLS) model. The procedure for running the 2SLS was: first, regression of the use of strong ties (UST) and weak ties (UWT) was performed on the two instrument variables, the number of close family members in the industry (NFM), use of social media (USM), and all other control variables. The predicted values of UST and UWT were saved. Then, regression of firm performance was performed on the predicted values of UST and UWT from the first stage model with all the control variables.

After a check of construct validity, hierarchical regression analysis was used to test the hypotheses. With only control variables in the model and network ties added later, the R-squares and p-value of the models were reported. The importance of each individual independent variable could be measured by the scale and significance of the regression coefficients. The interaction between managerial ties and ownership type and subgroup analysis were used to test whether the effects of managerial ties differed among the three types of firms.

Hypothesis 6: Chi-square testing

The ranking data were used, the dependent variable ranking been treated as a categorical variable. Chi-square analysis was applied to allow comparison of the differences among managers from firms of different ownership types.

The next chapter presents the results from the survey study. The results are weighed against the hypotheses and the implications are discussed following each result section.

CHAPTER FOUR

RESULTS

This chapter starts with an introduction of the sample profiles for the informants and their hotels. It is followed by a comparison of the numbers of managerial ties among hotels of different ownership types. The test results for the entire data set are reported to show the effects of managerial ties on entrepreneurial firms. Taking the perceived performance measurements as ordinal data, ordinal logistic regression results are reported in the next section. A fixed effects model is employed to control for the unobserved chain-level heterogeneities. Then, three subgroup analyses using a fixed effects model are conducted for SOEs, private firms, and joint ventures. A chi-square test is conducted on the ranks of network ties among firms of different ownership types.

Sample Profiles

A total number of 342 economy hotel general managers submitted their responses through on-line survey or hard copy questionnaires. Among these samples, some of the economy hotels were founded before 2002 and were not recognized as entrepreneurial firms by the definition of this study. Many others were founded in late 2009 or 2010 and did not have usable operational data for the year 2009. These firms were excluded from the analysis. A few informants only filled out a small portion of the questionnaire and did not offer contact information for follow-up data collection procedures; they were also deleted. A very small number of responses collected from economy hotel chain headquarters proved to have come from people other than general managers themselves, so these samples were not included in the study, either.

The final sample size was 230, which was larger than the required sample size calculated through statistic formulas. The informants came from 52 different cities in both developed coastal regions and less developed middle and western regions of China. Forty-four of these 52 cities were from the top 70 ranking list in terms of city GDP in 2009.

As reported in Table 5, about 63 percent of the general managers were male, a much higher rate than for female informants. Because no manager reported having a lower educational attainment than a high school diploma, this category was combined with those having high school diplomas. Less than 10% of the total informants fell in this category. Half of the informants had studied at college or had an associate degree. The second largest group in terms of educational attainment was general managers with a bachelor's or graduate degree.

Table 5 Gender and Educational Attainment of the Informants

Variable	Frequency	Percentage
Gender		
Male	145	63.0
Female	85	37.0
Academic Degree		
High school diploma or lower	21	9.1
Some college or an associate degree	115	50.0
Bachelor's or graduate degree	94	40.9

Table 6 includes information on three continuous informant profile variables: age, work experience, and hotel industry work experience. The average age of these informants was 36, with the eldest being 60 and the youngest being 18. These managers had worked in the hotel

industry for an average of 11.5 years. Their average work experience was 15.1 years, the shortest being one year and the longest being 42 years.

Table 6 Age and Work Experience of the Informants

Variable	Mean	Std dev	Min	Max
Age	36.1	7.3	18	60
Work experience	15.1	8.1	1	42
Hotel industry work experience	11.5	7.4	1	37

As shown in Table 7, over 90 percent of the economy hotels were located in urban areas and less than 10 percent in suburban areas. The trend is that most economy hotel chains started from large cities and then began to expand to second- or third-tier cities when the markets in big cities became more and more saturated. In addition to the over 70 percent of hotels located on major traffic routes, a little more than one-fourth of the hotels are located on side roads. While no four or five-star hotels would select a side road location, many economy hotels choose properties that are not on major traffic routes to lower property leasing costs. Many economy hotels were also converted from manufacturing workshops or residential apartments. About 60 percent of the hotels were from the top 10 cities with the highest GDP in 2009. These cities are: Shanghai, Beijing, Guangzhou, Shenzhen, Tianjin, Suzhou, Chongqing, Hangzhou, Wuxi, and Qingdao. One-fifth of the informants were from state-owned hotels and about one-third from private hotels. The largest group, with 100 general managers, was from joint ventures. Only eight informants were from exclusively foreign-owned hotels.

Table 7 Ownership Type, Location, Age, and Operation Model of Participating Hotels

Variable	Frequency	Percentage
Ownership type		
SOE	44	19.1
Private	78	33.9
Joint venture	100	43.5
Exclusively foreign-owned	8	3.5
Location (urban vs. suburban)		
Urban	210	91.3
Suburban	20	8.7
Location (major traffic route vs. side road)		
Major traffic route	167	72.6
Side road	63	27.4
Large city (large city vs. others)		
Top 10 cities	136	59.1
Others	94	40.9
Hotel founding year		
2002-2004	16	7.0
2005	12	5.2
2006	24	10.4
2007	65	28.3
2008	87	37.8
2009 (Jan to Jun)	26	11.3
Operation model		
Owned/leased and operated by a hotel chain	179	77.8
Owned/leased by another party, but managed by a team from the hotel chain and using the chain brand	18	7.8
Operated independently by the owner but using the hotel chain brand	6	2.6
Operated independently by an owner-hired professional manager but using the hotel chain brand	6	2.6
Independent	21	9.1

Only 21 general managers included in the analysis were from independent hotels. Eighteen hotels were managed by hotel chains and 12 hotels were franchised. The rest of the hotels, about 78 percent of the total, were owned/leased chain-affiliated hotels. About two-thirds of the hotels were founded in 2007 and 2008. Fewer than one-fourth of the hotels were founded in 2006 or before. About two dozen hotels founded in the first six months of 2009 were included in the study because they had been operating for over six months and could provide the required operational data for the year of 2009.

The average size of these hotels was 133 rooms as reported in Table 8. The range of the sizes of the hotels was very wide, however. The smallest hotel, an independently operated hotel in Shandong Province, only had 20 rooms, while the largest hotel, an international, chain-affiliated hotel located in Shanghai, had 472 rooms.

Table 8 Number of Hotel Rooms

Variable	Mean	Standard Deviation	Min	Max
Number of hotel rooms	133.2	78.4	20	472

Construct validity

All the measurements of independent variables and performance variables were based on self-reported data. Due to the fallibility of human memory, those measurements could have an inherit bias (e.g., see Schacter, 1999). Several arrangements were made to reduce the bias. First, the author collected multiple objective performance data, such as RevPAR and occupancy rate, to triangulate the results. Second, only recent data (performance data in 2009) was collected. This would reduce the errors caused by the transience of human memories. Finally, this study only used well-established, self-reported measures, which have obtained construct validity

through validation elsewhere. For example, the measurements of managers' use of network ties were borrowed from Peng and Luo (2000), and the measurements of strong ties and weak ties were borrowed from Batjargal (2003). The construct validity of Peng and Luo's (2000) managerial tie measurements was tested and discussed by Li *et al*. (2008) following a method recommended by Anderson and Gerbing (1988).

The present study also collected subjective performance data. When accurate objective measures of performance data are not available, subjective measurements are the only alternative. Studies have found that top management teams' subjective perceptions of firms' relative performance over competitors strongly correlate with objective measures (Dess & Robinson, 1984). The section in this chapter reporting the descriptive statistics shows that the subjective and objective performance measurements correlate highly with each other.

MANOVA Comparison of Numbers of Ties

MANOVA allows the researcher to analyze more than one dependent variable at the same time (Bray & Maxwell, 1985). It was used to test whether there were significant differences in the numbers of network ties among managers from firms of different ownership types. This study collected data on four types of network ties, i.e., number of strong political ties (NSPT), number of strong business ties (NSBT), number of weak political ties (NWPT), and number of weak business ties (NWBT). Due to the small number of samples for exclusively foreign-owned firms, these were combined with joint ventures to form the foreign firm category for the MANOVA analysis.

The MANOVA results showed no significant differences for NSPT, NSBT, and NWBT among managers of the three different ownership types. The only significant model was for the

number of weak political ties ($p<0.05$). The contrasting results shown in Table 9 implies that managers of SOEs had more weak political ties than those of private and foreign firms.

As we can read from the table, on average, managers of SOEs had 33 more weak political ties than those of private firms and about 30 more weak political ties than those of foreign firms. A diagnostic of the assumptions found that both the original data for number of weak political ties and the residuals of the model were not normal. The statistical result was also highly influenced by a few data points. Many commonly used data transformation techniques were used (e.g., Log and square root transformation) but did not solve the problem. Because the ANOVA assumptions were violated, a nonparametric analogue to one-way ANOVA, the Kruskal-Wallis test, was employed. The basic idea of the test is to transform the original data into rank data and conduct an ANOVA on the transformed data. Instead of comparing the means, it compared the medians of the different groups.

Table 9 Comparison of Numbers of Weak Political Ties

Contrast	Estimate	Standard Error	t Value	Pr > |t|
SOE vs. private	32.95	10.83	3.04	0.0027
SOE vs. foreign	30.51	10.17	3.00	0.0031
Private vs. foreign	-2.44	8.78	-0.28	0.7817

The new data in Table 10 showed that the Kruskal-Wallis model for testing the rank-transformed NWPT among general managers of SOEs, private, and foreign firms was not significant any more ($Pr>F=0.14$). Furthermore, the pair-wise contrast between managers of SOEs and private firms was also insignificant. The comparison between managers of SOEs and foreign firms was only significant at the 0.10 level. Because the rank data were sorted in an increasing order (manager with the fewest network ties was assigned a rank number of 1), the

result could be explained as showing that the average rank of the number of weak political ties for managers in SOEs was 20.7 more than that of foreign managers. In other words, the median of SOE managers' numbers of weak political ties was larger than that of foreign firms.

Table 10 Comparison of Rank-transformed Numbers of Weak Political Ties

Contrast	Estimate	Standard Error	t Value	Pr > |t|
SOE vs. private	11.92	11.26	1.06	0.2910
SOE vs. foreign	20.71	10.56	1.96	0.0514
Private vs. foreign	8.79	9.13	0.96	0.3366

The comparison of the newly rank-transformed data showed additional significant results for other types of ties. For example, the rank-transformed number of strong political ties indicated a pattern similar to that of weak political ties. In Table 11, the results show a significant difference between managers of SOEs and foreign firms in terms of rank-transformed data on NSPT (at the 0.10 level). This means that, on average, the mean value for the rank of managers' strong political ties for SOEs was 18 more than that for managers of foreign firms. This could also be explained as showing that the median of SOE managers' numbers of strong political ties was larger than that of managers of foreign firms.

Table 11 Comparison of Rank-transformed Numbers of Strong Political Ties

Contrast	Estimate	Standard Error	t Value	Pr > |t|
SOE vs. private	11.26	11.28	1.00	0.3191
SOE vs. foreign	17.95	10.61	1.69	0.0923
Private vs. foreign	6.69	9.13	0.73	0.4643

Table 12 shows that the rank-transformed data on the number of strong business ties differed between SOEs and foreign firms at the 0.05 level. Thus, it means that the median number of strong business ties for SOE managers was higher than that for foreign firm managers.

Table 12 Comparison of Rank-transformed Numbers of Strong Business Ties

Contrast	Estimate	Standard Error	t Value	Pr > |t|
SOE vs. private	11.92	11.26	1.06	0.2910
SOE vs. foreign	20.71	10.56	1.96	0.0514
Private vs. foreign	8.79	9.13	0.96	0.3366

The results supported part of Hypothesis 1a in that managers of SOEs had more strong ties than those of foreign firms. The data show that this involved both strong political ties and strong business ties. Meanwhile, Hypothesis 1b was not supported by the study. The difference in network size for SOEs and private firms was not significant.

The Importance of Strong Ties and Weak Ties: Whole Data Set Analysis

Both dependent variables and independent variables were measured by more than one approach in this study. The multiple measurements allowed the author to triangulate the relationships between the variables. For the dependent variables of firm performance, the original design tried to collect data on objective measurements such as RevPAR, occupancy rate, and return on assets. Data on hotel revenue, room number, and number of rooms sold in 2009 were successfully obtained, so occupancy rate and RevPAR could be calculated from the available information. However, during the data collection process, many property-level general managers did not know the assets of their properties and many informants were unwilling to

reveal profit-related information. Therefore, the objective measurement of ROA was not used for the final analysis.

Subjective performance measurements include managers' perceived service quality, guest satisfaction, occupancy rate, average room rate, and gross profit compared with their direct competitors. A seven-point Likert item was used for each of the categories. Among the five subjective items, three were selected as individual dependent variables for the regression analysis. The first was perceived occupancy rate compared with direct competitors. The reason for choosing it was to compare it with the objective occupancy rate measurement. The second was perceived gross profit compared with direct competitors, since it could substitute for the objective profit measurement. The last was perceived service quality compared with direct competitors, because it could complement those financial measurements. The reason for dropping guest satisfaction was that regression results for it were similar to those for perceived service quality. Perceived room rate was not included because most of its correlation coefficients with independent variables were not significant. Since there are arguments against the use of a single Likert item for interval data in running an OLS regression (e.g., Jamieson, 2004), alternative ways of addressing this question have been included in the following section.

Two sets of measurements were collected for independent variables. One set was the number of managers' network ties and the other was the extent to which managers utilized network ties. As noted in the previous section, the number of ties was highly skewed, there were a few highly influential points, and many traditional approaches to data transformation did not fix the problem. Rank transformation has been used to compare the mid-values of the number of ties, but the meaning of the regression model using rank-transformed data is hard to explain.

Therefore, the extent to which managers utilized strong ties and weak ties was employed to measure managers' networking activities.

The original survey collected information on over 10 control variables based on different theories and previous hotel performance-related studies. The R-square best set selection method was used to choose variables to be included in the final model. The variable selection process was finalized with the following independent and control variables, as listed in Table 13: ownership type, location of the hotel (major route or side road, large city or not), operation model of the hotel, hotel size, and gender, hotel industry work experience, educational attainment, and age of general managers.

Table 13 R-square Best Set Variable Selection Results

Dependent Variable	Independent and Control Variable
Occupancy rate	UST; ownership type; urban, major road; hotel working years; male managers; large city; operation model
RevPAR	UWT; hotel age; urban, major road; hotel size; age of managers; degree
Perceived service quality	UST; ownership type; hotel size; age of managers; operation model, degree
Perceived occupancy rate	UST; ownership type; major road; hotel size; hotel working years; large city; degree
Perceived profit	UWT; ownership type; major road; hotel size; large city; degree
Perceived performance	UST; ownership type; major road; male; large city; operation model

Two potential instrument variables were created for the regression model. They were the number of close family members in the hotel industry before a manager started to work in his/her

current position (NFM), and the number of social media used by the general manager (USM). The rationale for picking the two instrument variables was discussed in Chapter Three. A Sargan test was run to check the exogeneity of the two instrument variables. The process of the test is to run the 2SLS and obtain the residuals first. Then, the original regression is run with residuals included as a new independent variable. The number of observations (N) and R-square could be obtained from the model. N*R square follows a Chi-square distribution with the degree of freedom being the number of instrument variables minus the number of endogenous variables. Using perceived service quality as the dependent variable and UST as the independent variable, the total number of observations was 222, and the R-square was 0.0055. Then, N* R-square =1.221, less than the Chi-square critical value with one degree of freedom (3.84). The insignificance of the test showed that there was not enough evidence to deny that the instrument variables were exogenous.

Using weak instruments leads to misspecification problems (Murray, 2006). A general rule of thumb was used by Yogo (2004) to test the relevance of the instrument variables. When there is only one endogenous variable, a first step regression F value of over 10 is required to avoid weak instruments. The current study obtained an F value of 1.52, far lower than 10. This meant that both were weak instrument variables. Therefore, the 2SLS regression was not run and the two instrument variables were used as control variables in the study.

The descriptive statistics of the variables included are provided in Table 14 and 15. Table 14 includes the Pearson correlation coefficient of all variables. Table 15 provides information on the mean, the standard deviation, and the maximum and minimum values of the variables.

Table 14 Pearson Correlation Coefficient of the Variables (to be continued)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1.Occupancy rate	1																						
2. RevPAR	0.42**	1																					
3.Perceived occupancy	0.51**	0.28**	1																				
4.Perceived service	0.19**	0.15*	0.43**	1																			
5. Perceived profit	0.33**	0.30**	0.65**	0.53**	1																		
6. Perceived performance	0.39**	0.34**	0.79**	0.79**	0.85**	1																	
7.Use of strong ties	0.12#	0.03	0.19**	0.23**	0.11#	0.19**	1																
8.Use of weak ties	0.07	0.05	0.15*	0.19**	0.14*	0.17*	0.75**	1															
9.SOE	-0.16	-0.12	-0.22**	-0.06	-0.19**	-0.20**	-0.06	-0.10	1														
10.Private	-0.08	0.08	-0.10	-0.30**	-0.12#	-0.20**	-0.04	0.06	-0.35**	1													
11.Joint venture	0.25**	0.07	0.29**	0.29**	0.26**	0.33**	0.07	0.00	-0.43**	-0.63**	1												
12 .Major road	0.06	0.11#	0.10	-0.05	0.15*	0.09	0.00	0.03	0.03	0.07	-0.11#	1											
13.Owned	0.11#	0.01	0.09	0.16*	0.01	0.08	0.09	0.06	-0.03	-0.39**	0.40**	-0.02	1										
14.Managed or franchised	-0.01	0.02	-0.09	-0.05	0.04	-0.03	-0.10	-0.03	0.06	0.10	-0.16*	-0.11#	-0.55**	1									
15 .Hotel working year	0.06	0.12#	-0.14*	-0.04	-0.05	-0.07	0.04	0.05	0.27**	-0.10	-0.10	0.06	0.00	0.09	1								
16.Number of rooms	-0.08	0.12#	0.06	-0.02	0.09	0.07	0.05	0.09	-0.08	-0.10	0.07	0.12#	-0.12#	0.14*	0.09	1							

Table 14 (Continued)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
17. Male	0.06	-0.03	0.01	-0.15 *	-0.04	-0.08	-0.07	-0.07	0.05	-0.14 *	0.11 #	-0.01	0.003	0.16 *	-0.09	0.13 *	1						
18. Large city	-0.10	0.04	-0.11 #	-0.07	-0.16 *	-0.15 *	-0.05	-0.03	0.11 #	0.02	-0.07	-0.21 **	0.05	0.08	0.10	0.01	-0.03	1					
19. up to Associate degree	0.06	-0.05	0.02	0.03	0.04	0.06	-0.02	-0.06	-0.04	-0.04	0.09	-0.07	0.09	0.10	0.12 #	-0.08	0.06	0.07	1				
20. Bachelor and graduate degree	-0.01	0.00	0.04	0.04	-0.03	0.003	0.11	0.14 *	0.05	-0.15 *	0.07	-0.02	-0.05	-0.04	-0.06	0.10	0.01	-0.05	-0.83 **	1			
21. Age	-0.01	0.11 #	-0.13 *	-0.09	-0.08	-0.10	0.00	-0.01	0.35 **	-0.14 *	-0.11 #	0.04	0.05	-0.02	0.70 **	-0.03	-0.04	0.21 **	0.01	0.05	1		
22. Family members in hotel industry	0.05	0.02	0.00	-0.02	0.02	-0.02	0.09	0.13 *	-0.05	0.20 **	-0.12 #	0.13 #	-0.01	-0.05	0.03	-0.05	0.09	-0.04	-0.09	0.04	0.02	1	
23. Use of social media	0.08	-0.08	0.12 #	0.10	0.08	0.10	0.18 **	0.17 **	-0.12 #	0.00	0.05	-0.07	0.03	0.03	-0.27 **	0.00	-0.09	-0.01	-0.04	0.10	-0.34 **	0.03	1

Note: Significance levels: ** <0.01; * <0.05; # <0.10

Table 15 Means and Standard Deviations for Independent Variables

	Occupancy Rate		RevPAR		Perceived Service		Perceived Profit	
	N	Mean (Std Dev)	N	Mean (Std Dev)	N	Mean (Std Dev)	N	Mean (Std Dev)
Use of strong ties	230	3.23 (1.62)	229	3.24 (1.62)	228	3.25 (1.62)	226	3.24 (1.61)
Use of weak ties	230	3.21 (1.55)	229	3.21 (1.55)	228	3.23 (1.55)	226	3.22 (1.56)
SOE	230	0.19 (0.39)	229	0.19 (0.39)	228	0.19 (0.40)	226	0.19 (0.39)
Private	230	0.34 (0.47)	229	0.34 (0.47)	228	0.34 (0.47)	226	0.34 (0.47)
Joint venture	230	0.43 (0.50)	229	0.44 (0.50)	228	0.43 (0.50)	226	0.44 (0.50)
Major road	230	0.73 (0.45)	229	0.72 (0.45)	228	0.73 (0.45)	226	0.73 (0.44)
Owned	230	0.78 (0.42)	229	0.78 (0.41)	228	0.78 (0.42)	226	0.77 (0.42)
Managed or franchised	230	0.08 (0.27)	229	0.08 (0.27)	228	0.08 (0.27)	226	0.08 (0.27)
Hotel working year	229	11.49 (7.44)	229	11.49 (7.44)	227	11.47 (7.44)	225	11.39 (7.39)
Number of rooms	230	133.16 (78.38)	229	133.18 (78.55)	228	133.43 (78.61)	226	133.88 (78.79)
Male	230	0.63 (0.48)	229	0.63 (0.48)	228	0.63 (0.48)	226	0.63 (0.48)
Large city	230	0.59 (0.49)	229	0.59 (0.49)	228	0.60 (0.49)	226	0.60 (0.49)
Up to associate degree	230	0.50 (0.50)	229	0.50 (0.50)	228	0.50 (0.50)	226	0.50 (0.50)
Bachelor and graduate degree	230	0.41 (0.49)	229	0.41 (0.49)	228	0.41 (0.49)	226	0.42 (0.49)
Age	230	36.14 (7.27)	229	36.14 (7.29)	228	36.16 (7.29)	226	36.14 (7.28)
Family members in hotel industry	226	0.81 (1.25)	225	0.81 (1.25)	224	0.82 (1.25)	222	0.82 (1.26)
Use of social media	230	1.96 (1.03)	229	1.97 (1.03)	228	1.97 (1.03)	226	1.97 (1.03)

Subjective performance measurements

Due to the fact that multiple dependent variables were used, a multivariate multiple regression was run to test the significance of the models. The results of the regression analysis using perceived service quality as a dependent variable are listed in Table 16.

For each independent variable, four different models were run to compare the effectiveness of UST and UWT. The first one is the baseline model with only control variables. The second model adds one independent variable UST and the third model adds the other independent variable UWT to the baseline model. In the fourth model, both UST and UWT are added. All succeeding tables reporting regression results follow a similar pattern.

As seen in Table 16, manager's use of network ties was positively related to the subjective measurement of perceived service quality compared with direct competitors. This result is consistent with many previous studies and supports the social network theory claim that the social capital embedded in the background and connections of managers can help to improve firm performance. When perceived service quality was the dependent variable, both strong ties and weak ties were significant, supporting Hypotheses 2a and 2b that both managers' strong ties and weak ties were positively related to firm performance. The data from Models 16-2 and 16-3 showed that an additional unit increase of using strong ties would increase the perceived service quality compared with direct competitors by 0.14 unit. For weak ties, it will increase by 0.13 unit.

Table 16 The Effects of Network Ties on Perceived Service Quality

	DV=Perceived Service Quality			
	Model 1 Coeff. (SE)	Model 2 Coeff. (SE)	Model 3 Coeff. (SE)	Model 4 Coeff. (SE)
Use of strong ties (UST)		0.14** (0.04)		0.10 (0.06)
Use of weak ties (UWT)			0.13** (0.05)	0.06 (0.07)
SOE	-0.59 (0.41)	-0.57 (0.40)	-0.51 (0.41)	-0.54 (0.41)
Private	-1.12** (0.40)	-1.16** (0.39)	-1.15** (0.39)	-1.16** (0.39)
Joint venture	-0.22 (0.38)	-0.24 (0.37)	-0.17 (0.38)	-0.21 (0.37)
Major road	-0.08 (0.16)	-0.08 (0.16)	-0.08 (0.16)	-0.08 (0.16)
Owned	0.15 (0.23)	0.13 (0.22)	0.08 (0.23)	0.11 (0.23)
Managed or franchised	0.27 (0.32)	0.34 (0.31)	0.26 (0.31)	0.32 (0.31)
Hotel working year	0.0003 (0.01)	0.0003 (0.01)	0.0003 (0.01)	0.0007 (0.01)
Number of rooms	-0.0004 (0.001)	-0.0006 (0.001)	-0.0006 (0.001)	-0.0006 (0.001)
Male	-0.46** (0.15)	-0.41** (0.15)	-0.41** (0.15)	-0.40** (0.15)
Large city	-0.11 (0.15)	-0.08 (0.15)	-0.09 (0.15)	-0.08 (0.15)
Up to associate degree	-0.01 (0.28)	-0.13 (0.28)	-0.13 (0.28)	-0.15 (0.28)
Bachelor and graduate degree	-0.06 (0.29)	-0.21 (0.29)	-0.24 (0.29)	-0.25 (0.29)
Age	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)
Family members in hotel industry	0.07 (0.06)	0.06 (0.06)	0.05 (0.06)	0.05 (0.06)
Use of social media	0.01 (0.07)	-0.02 (0.07)	-0.01 (0.07)	-0.02 (0.07)
Model F	3.19	3.74	3.62	3.56
P<	0.001	0.001	0.001	0.001
R-square	0.192	0.229	0.224	0.232
Model df	15	16	16	17

Note a: Sample size is 218.

b: significance levels: ** <0.01; * <0.05; # <0.10

When running the regression model and testing the assumptions, the author found that UST and UWT highly correlated. The Pearson correlation coefficient between the two was 0.75.

When one of them was added into the model separately, either one or the other was significant. When both UST and UWT were added into the model, neither was significant. This was caused by multicolinearity. However, many regression results from the present study also showed differences between the UST and UWT. Under certain conditions (e.g., using perceived occupancy rate as a dependent variable), only the UST was significant, and under other conditions (e.g., using perceived profit as a dependent variable), only the UWT was significant, proving they were not identical and could not substitute for one another.

In these different models, some control variables were also significant. For instance, in Models 16-2 and 16-3, the variable private was significant. This means that the service quality perceived by the managers was significantly worse for private economy hotels than for exclusively foreign-owned ones. This could be due to the fact that exclusively foreign-owned economy hotels in China belong to international hotel chains with decades of history and experience. They follow very strict quality standards and service procedures. Almost all these foreign-owned economy hotel brands are affiliated with a large hotel group with multiple brands. Poor services of one brand may damage the reputation and image of other brands from the same group. For example, a top executive of an exclusively foreign-owned economy hotel chain revealed that their primary objective in building economy hotels in China was to recruit members and form a potential customer base for its other leisure products. Maintaining high service standards is key to their strategic goals in China. Nevertheless, most private economy hotels are new players in this segment and not all of them have developed and maintained high service standards.

Also in these two models, the coefficients of the variable “male” were negative and significant, suggesting that the perceived service qualities of hotels with male managers were not

as good as those of hotels with female managers. It could be that, on average, female managers take care of services better than male managers. However, since the dependent variable was measured by perceived service quality, the result could also mean that female managers were more optimistic about their hotel services.

Likert items were treated as interval data and parametric analytic tools were used in the previous sections. However, this procedure was considered problematic by some researchers (Clason & Dormody, 1994; Jamieson, 2004). Whether a single Likert item can be used for interval data and subject to parametric analysis tools has long been debated (Armstrong, 1981, 1984; Knapp, 1984, 1990). Some have insisted that data measured by Likert items can only be treated as ordinal data and cannot be subject to arithmetical manipulations such as calculating the means. The reason is that the values falling into the middle of integers have no meaning and the intervals between two neighboring points are not equal. Because subjective dependent variables can only be expressed as whole numbers one through seven, the regression residual plots for some models showed patterns, indicating that residuals were not independent of each other. Others have suggested that a single Likert item can be used for interval data as long as certain rules are followed. Some studies have shown that it does not matter much empirically when an ordinal scale is treated as interval one (Labovitz, 1967).

If a stricter rule is followed, two additional analyses can be conducted to address the problem. One is to combine the multiple subjective performance items into one overall subjective performance measurement. The author used principle component analysis to determine the dimensions of the five subjective performance measurement items. Only one Eigenvalue was over 1, suggesting a single dimension to the measurement. The Eigenvectors coefficients from the process were used to combine the items. Perceived performance = 0.45

Service quality + 0.46 Customer satisfaction + 0.43 Occupancy rate + 0.43 Rate + 0.46 Profit. The multiple linear regression was then performed using the newly created perceived performance measurement.

With perceived performance as the dependent variable, the regression result is very similar to that with perceived service quality. The data from Models 17-2 and 17-3 showed that, when managers used an additional unit of strong ties, the perceived performance compared with direct competitors would increase by 0.20 unit. For weak ties, it would increase by 0.21 unit.

Another way to deal with the methodological argument is to take the individual Likert items as ordinal data and use models specifically designed for this type of data. The results of ordinal logistic regression are shown in Table 18. Both UST and UWT are positively related to firm performance, supporting Hypothesis 2a and 2b. Taking Model 18-4 as an example, UST was significant at a 0.01 level and the regression coefficient for UST is 0.25. This means that each additional unit use of strong ties increased the odds of being in a higher category of perceived quality by about 25%.

Table 17 The Effects of Network Ties on Perceived Performance

	DV=Perceived Performance			
	Model 1 Coeff. (SE)	Model 2 Coeff. (SE)	Model 3 Coeff. (SE)	Model 4 Coeff. (SE)
UST		0.20* (0.09)		0.12 (0.13)
UWT			0.21* (0.09)	0.11 (0.14)
SOE	-0.65 (0.83)	-0.62 (0.82)	-0.53 (0.82)	-0.56 (0.82)
Private	-0.72 (0.80)	-0.78 (0.80)	-0.76 (0.80)	-0.78 (0.80)
Joint venture	0.85 (0.77)	0.83 (0.76)	0.93 (0.76)	0.88 (0.76)
Major road	0.50 (0.33)	0.50 (0.32)	0.49 (0.32)	0.49 (0.32)
Owned	-0.07 (0.46)	-0.09 (0.45)	-0.17 (0.46)	-0.14 (0.46)
Managed or franchised	0.34 (0.64)	0.46 (0.63)	0.33 (0.63)	0.40 (0.63)
Hotel working year	-0.01 (0.03)	-0.01 (0.03)	-0.01 (0.03)	-0.01 (0.03)
Number of hotel rooms	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)
Male	-0.63* (0.31)	-0.57# (0.30)	-0.56# (0.30)	-0.55# (0.30)
Large city	-0.51# (0.30)	-0.45 (0.30)	-0.47 (0.30)	-0.45 (0.30)
Up to associate degree	0.31 (0.57)	0.14 (0.57)	0.12 (0.57)	0.10 (0.57)
Bachelor and graduate degree	0.06 (0.58)	-0.16 (0.58)	-0.23 (0.59)	-0.23 (0.59)
Age	-0.01 (0.03)	-0.01 (0.03)	-0.004 (0.03)	-0.005 (0.03)
Family members in hotel industry	0.07 (0.11)	0.05 (0.11)	0.03 (0.11)	0.04 (0.11)
Use of social media	0.09 (0.15)	0.04 (0.11)	0.05 (0.15)	0.04 (0.15)
Model F	2.90	3.11	3.09	2.96
P<	0.001	0.001	0.001	0.001
R-square	0.177	0.198	0.198	0.201
Model df	15	16	16	17

Note a: Sample size is 218.

b: Significance levels: ** <0.01; * <0.05; # <0.10

Table 18 Ordinal Logistic Regression: Perceived Service Quality as a Dependent Variable

	DV=Perceived Service Quality			
	Model 1 Coeff. (SE)	Model 2 Coeff. (SE)	Model 3 Coeff. (SE)	Model 4 Coeff. (SE)
UST		0.28** (0.08)		0.25** (0.12)
UWT			0.24** (0.09)	0.05 (0.13)
SOE	-1.29# (0.77)	-1.32# (0.77)	-1.24 (0.77)	-1.31# (0.78)
Private	-2.09** (0.76)	-2.25** (0.76)	-2.25** (0.76)	-2.27** (0.76)
Joint venture	-0.47 (0.71)	-0.52 (0.71)	-0.47 (0.71)	-0.52 (0.71)
Major road	-0.10 (0.30)	-0.07 (0.30)	-0.09 (0.30)	-0.07 (0.30)
Owned	0.03 (0.42)	-0.09 (0.42)	-0.12 (0.42)	-0.11 (0.42)
Managed or franchised	0.68 (0.59)	0.74 (0.59)	0.62 (0.59)	0.72 (0.60)
Hotel working year	0.01 (0.02)	0.002 (0.03)	0.003 (0.03)	0.002 (0.03)
Number of rooms	-0.001 (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)
Male	-0.88** (0.28)	-0.78** (0.28)	-0.79** (0.28)	-0.78** (0.28)
Large city	-0.22 (0.27)	-0.12 (0.28)	-0.17 (0.27)	-0.12 (0.28)
Up to associate degree	0.30 (0.50)	0.04 (0.51)	0.08 (0.51)	0.02 (0.51)
Bachelor and graduate degree	0.11 (0.51)	-0.21 (0.52)	-0.20 (0.52)	-0.24 (0.52)
Age	-0.03 (0.03)	-0.03 (0.03)	-0.03 (0.03)	-0.03 (0.03)
Family members in hotel industry	0.08 (0.10)	0.06 (0.11)	0.06 (0.11)	0.05 (0.11)
Use of social media	0.06 (0.13)	0.01 (0.14)	0.02 (0.13)	0.01 (0.14)
Model Chi-Square	39.69	48.88	45.49	49.00
P<	0.01	0.01	0.01	0.01
R-square	0.179	0.222	0.208	0.223
Model df	15	16	16	17

Note a: Sample size is 223.

b: Significance levels: ** <0.01; * <0.05; # <0.10

Objective performance measurements

For two objective performance measurements, occupancy rate and RevPAR, neither UST nor UWT was significant. When a refined measurement, the use of strong political ties (USPT), was used, it was positively related to firm performance. This is consistent with previous findings that strong ties are more willing to offer help during entrepreneurial processes and political ties are key to firm performance in a transitional economy.

The regression showed that the use of strong political ties was positively related to revenue per available room. The model was significant at the 0.10 level and the regression coefficient was 6.11 for USPT. This means that, for those managers who used one additional unit of strong political ties, the RevPAR of their economy hotels would increase by 6.11RMB.

The whole data set regression results are summarized in Table 19. The results support a conclusion in previous studies that the use of dependent variables could be a contingent factor for the strong and weak tie paradox (Bruderl & Priesendorf, 1998; Delmestri *et al*., 2005; Park & Luo, 2001). Park and Luo (2001) found that *guanxi* utilization could lead to higher sales growth, but had no effect on profit growth. In this study, when performance was measured by occupancy rate, neither strong ties nor weak ties were significant. When the dependent variable was measured by RevPAR and Perceived occupancy rate, only strong ties were important, supporting Hypothesis 2a. When measuring performance by perceived gross profit, only weak ties were important, supporting Hypothesis 2b. Using perceived service qualities and perceived performance, both strong ties and weak ties were important, supporting both Hypotheses 2a and 2b.

Table 19 Effects of Managers' Network Ties on Firm Performance: OLS Model Results

Types of Ties	Occupancy Rate	RevPAR	Perceived Occupancy	Perceived Services	Perceived Profit	Perceived Performance
Strong ties		+(SPT) .10 level	+	+		+
Weak ties				+	+ .10 level	+

The fixed effects model

Since the final 230 valid samples came from 30 economy hotel chains, the effects of strong ties and weak ties could be affected by unobserved chain-level heterogeneities. By using the Generalized Linear Model (GLM) with chain dummies, we can rule out the effects of those unobserved chain-level heterogeneities. The results for the fixed effects model are shown in Table 20.

After adding chain dummies, the previously significant variable, the use of weak ties, becomes insignificant. The use of strong ties is significant, but only at a 0.10 level. One reason is that the new model only uses within-group variance and drops the inter-group variance for the analysis. Adding a large number of dummy variables also causes a loss of degrees of freedom and may turn significant models into insignificant ones.

The fixed effects models using other performance measurements are not significant. The results are summarized in Table 21.

Table 20 Effects of Manager's Network Ties on Perceived Service Quality: The Fixed Effects Model

	DV=Perceived Service Quality			
	Model 1 Coeff. (SE)	Model 2 Coeff. (SE)	Model 3 Coeff. (SE)	Model 4 Coeff. (SE)
UST		0.09# (0.05)		0.09 (0.06)
UWT			0.06 (0.05)	0.001 (0.07)
SOE	-0.60 (0.82)	-0.65 (0.81)	-0.50 (0.82)	-0.65 (0.83)
Private	-1.66* (0.78)	-1.76* (0.77)	-1.61* (0.77)	-1.76* (0.78)
Joint venture	-0.46 (0.83)	-0.64 (0.83)	-0.44 (0.83)	-0.64 (0.84)
Major road	0.02 (0.16)	-0.01 (0.16)	-0.003 (0.16)	-0.01 (0.16)
Owned	-0.44 (0.42)	-0.43 (0.42)	-0.45 (0.42)	-0.43 (0.42)
Managed or franchised	-0.56 (0.42)	-0.51 (0.41)	-0.54 (0.41)	-0.51 (0.41)
Hotel working year	0.003 (0.01)	0.0002 (0.01)	0.0008 (0.01)	0.0002 (0.01)
Number of rooms	<-0.0001 (0.001)	-0.0001 (0.001)	-0.00004 (0.001)	-0.00007 (0.001)
Male	-0.47** (0.15)	-0.43** (0.15)	-0.46** (0.15)	-0.43** (0.15)
Large city	0.08 (0.17)	0.09 (0.17)	0.08 (0.17)	0.09 (0.17)
Up to associate degree	-0.04 (0.34)	-0.14 (0.34)	-0.12 (0.34)	-0.14 (0.34)
Bachelor and graduate degree	-0.06 (0.34)	-0.19 (0.34)	-0.18 (0.35)	-0.19 (0.35)
Age	-0.03 (0.01)	-0.03 (0.01)	-0.03# (0.01)	-0.03# (0.01)
Family members in hotel industry	0.07 (0.06)	0.07 (0.06)	0.06 (0.06)	0.07 (0.06)
Use of social media	-0.01 (0.08)	-0.02 (0.07)	-0.01 (0.08)	-0.02 (0.08)
Model F	2.89	2.95	2.88	2.87
P<	0.001	0.001	0.001	0.001
R-square	0.417	0.429	0.422	0.429
Model df	44	45	45	46

Note a: Sample size is 223.

b: Significance levels: ** <0.01; * <0.05; # <0.10

Table 21 Effects of Managers' Network Ties on Firm Performance: Fixed Effects Models

Types of Ties	Occupancy Rate	RevPAR	Perceived Occupancy	Perceived Services	Perceived Profit	Perceived Performance
Strong ties				+ .10 level		
Weak ties						

When the interaction terms between the use of network ties and ownership types were added, both the interaction terms and the original UST and UWT became insignificant. One reason could be the high multicolinearity among the variables. A subgroup analysis was used instead of regression with the interaction to compare the effects of network ties for managers in firms of different ownership types.

The Importance of Strong Ties and Weak Ties: The Subgroup Analysis

All the subgroup analyses were conducted using the fixed effects models. In other words, chain dummies were added into the model to control for the unobserved chain-level heterogeneities. Due to the small sample number of the exclusively foreign-owned hotels, it was not possible to conduct a subgroup analysis on this group. Therefore, comparisons of this group with other ownership types are not provided by this study.

Private firms

None of the models using objective performance measurements was significant for the private subgroup. The use of network ties was only significant in a few subjective performance models (e.g., perceived service quality, perceived profit, and perceived performance). In these models, only the UWT was significant, supporting Hypothesis 4a, which suggested that weak ties would be positively related to firm performance for private firms. Hypothesis 3a, which

proposed that the use of strong ties would be positively related to firm performance for private firms, was not supported (see Table 22).

Table 22 Effects of Managers' Network Ties on Perceived Service Quality and Perceived Performance: Results for Private Firms

	DV=Perceived Service Quality				DV=Perceived Performance			
	Model 1 Coeff. (SE)	Model 2 Coeff. (SE)	Model 3 Coeff. (SE)	Model 4 Coeff. (SE)	Model 5 Coeff. (SE)	Model 6 Coeff. (SE)	Model 7 Coeff. (SE)	Model 8 Coeff. (SE)
UST		0.003 (0.10)		-0.18 (0.11)		0.07 (0.20)		-0.30 (0.24)
UWT			0.24* (0.11)	0.37* (0.14)			0.51* (0.23)	0.73* (0.29)
Major road	0.51 (0.34)	0.51 (0.34)	0.38 (0.33)	0.39 (0.32)	1.44* (0.70)	1.41# (0.72)	1.16# (0.69)	1.18# (0.68)
Owned	-0.31 (0.62)	-0.31 (0.63)	-0.48 (0.60)	-0.46 (0.59)	-0.47 (1.30)	-0.52 (1.32)	-0.85 (1.26)	-0.81 (1.25)
Managed or franchised	-2.22** (0.64)	-2.22** (0.65)	-2.28** (0.61)	-2.37** (0.60)	-3.71** (1.34)	-3.69** (1.35)	-3.83** (1.28)	-3.98** (1.28)
Hotel working year	-0.02 (0.03)	-0.02 (0.03)	-0.04 (0.03)	-0.02 (0.03)	-0.04 (0.06)	-0.05 (0.07)	-0.08 (0.06)	-0.05 (0.07)
Number of rooms	0.001 (0.002)	0.001 (0.002)	0.0006 (0.002)	0.0002 (0.002)	0.01# (0.005)	0.01# (0.005)	0.01 (0.004)	0.01 (0.004)
Male	-0.75* (0.30)	-0.75* (0.31)	-0.66* (0.29)	-0.66* (0.29)	-0.97 (0.63)	-0.96 (0.64)	-0.79 (0.61)	-0.79 (0.61)
Large city	0.37 (0.36)	0.37 (0.36)	0.29 (0.34)	0.24 (0.34)	0.73 (0.75)	0.73 (0.76)	0.55 (0.72)	0.46 (0.72)
Up to Associate degree	0.18 (0.47)	0.17 (0.49)	-0.15 (0.48)	-0.18 (0.47)	1.55 (0.99)	1.49 (1.02)	0.84 (1.00)	0.79 (1.00)
Bachelor and graduate degree	-0.08 (0.46)	-0.08 (0.49)	-0.68 (0.52)	-0.71 (0.51)	0.97 (0.96)	0.86 (1.03)	-0.33 (1.09)	-0.38 (1.08)
Age	-0.04 (0.03)	-0.04 (0.03)	-0.03 (0.03)	-0.03 (0.03)	-0.03 (0.07)	-0.03 (0.07)	-0.01 (0.07)	-0.01 (0.06)
Family members in hotel industry	0.13 (0.10)	0.13 (0.10)	0.14 (0.09)	0.12 (0.09)	0.18 (0.20)	0.19 (0.21)	0.21 (0.19)	0.18 (0.19)
Use of social media	-0.26 (0.17)	-0.26 (0.17)	-0.31# (0.16)	-0.36* (0.16)	-0.42 (0.35)	-0.41 (0.36)	-0.53 (0.34)	-0.60# (0.34)
Model F	1.82	1.72	2.05	2.15	1.37	1.30	1.60	1.62
P<	0.037	0.053	0.016	0.012	0.171	0.212	0.078	0.074
R-square	0.579	0.579	0.621	0.645	0.509	0.510	0.562	0.579
Model df	31	32	32	33	31	32	32	33

Note a: Sample size is 73.

b: Significance levels: ** <0.01; * <0.05; # <0.10

Compared with SOEs, which can consistently obtain support from the government, and foreign firms, which enjoy preferential policies, private firms have faced many challenges in China. Private firms were not recognized as an essential component of the economy until 1997, and private assets and capital were not legalized by China's constitution until 2004 (Ralston *et al*., 2006). During the field trip, many executives from private firms said that the costs of developing and maintaining strong ties were much higher for them than for managers of SOEs and foreign firms. This resulted in their use of less costly weak ties to improve firm performance.

Taking Model 22-8 as an example, when using perceived performance as the dependent variable, the UWT was significant at a .05 level. This means that, when general managers of private firms used an additional unit of weak ties, the perceived performance compared with direct competitors would increase by a 0.73 unit. The regression coefficient of the control variable "managed or franchised" is significant, but with a negative sign, indicating that the perceived performance for managed or franchised private hotels was worse than that for independent private hotels. One counter-intuitive result is the negative sign of the control variable "the use of social media" as defined by the types of social media used by the general manager. This suggests that general managers of better performing private firms use fewer types of social media.

Joint ventures

The regression results for joint ventures show that UST is positively related to subjective performance measurements such as perceived service quality, perceived occupancy rate, and perceived performance. The results are consistent with the statement in Hypothesis 3b that strong ties are positively related to firm performance for joint ventures. However, the UWT is not

significant in any subgroup model for joint ventures; this does not support Hypothesis 4b, that weak ties are positively related to firm performance.

Table 23 Effects of Managers' Network Ties on Perceived Service Quality and Perceived Performance: Results for Joint Ventures

	DV=Perceived Service Quality				DV=Perceived Performance			
	Model 1 Coeff. (SE)	Model 2 Coeff. (SE)	Model 3 Coeff. (SE)	Model 4 Coeff. (SE)	Model 5 Coeff. (SE)	Model 6 Coeff. (SE)	Model 7 Coeff. (SE)	Model 8 Coeff. (SE)
UST		0.12* (0.06)		0.25** (0.09)		0.21 (0.13)		0.41* (0.20)
UWT			0.03 (0.06)	-0.17# (0.09)			0.05 (0.13)	-0.27 (0.20)
Major road	-0.04 (0.22)	-0.07 (0.22)	-0.04 (0.22)	-0.11 (0.22)	0.33 (0.47)	0.28 (0.47)	0.33 (0.48)	0.21 (0.47)
Owned	-0.30 (0.65)	-0.07 (0.65)	-0.30 (0.66)	0.18 (0.66)	-1.41 (1.39)	-1.02 (1.40)	-1.42 (1.40)	-0.63 (1.42)
Hotel working year	0.04# (0.02)	0.04# (0.02)	0.04# (0.03)	0.05* (0.02)	0.07 (0.05)	0.07 (0.05)	0.07 (0.05)	0.09 (0.05)
Number of rooms	-0.002 (0.002)	-0.003 (0.002)	-0.002 (0.002)	-0.003 (0.002)	0.002 (0.005)	0.001 (0.005)	0.002 (0.005)	0.0002 (0.005)
Male	-0.40# (0.22)	-0.35 (0.22)	-0.40# (0.22)	-0.30 (0.22)	-0.60 (0.47)	-0.50 (0.47)	-0.60 (0.47)	-0.43 (0.47)
Large city	0.18 (0.22)	0.19 (0.22)	0.18 (0.22)	0.17 (0.22)	-0.11 (0.47)	-0.09 (0.47)	-0.10 (0.48)	-0.13 (0.47)
Bachelor and graduate degree	-0.13 (0.19)	-0.12 (0.19)	-0.13 (0.19)	-0.07 (0.19)	-0.33 (0.41)	-0.32 (0.40)	-0.34 (0.41)	-0.23 (0.41)
Age	-0.06* (0.02)	-0.07** (0.02)	-0.06* (0.02)	-0.07** (0.02)	-0.09# (0.05)	-0.10# (0.05)	-0.09 (0.05)	-0.11* (0.05)
Family members in hotel industry	-0.01 (0.10)	-0.02 (0.10)	-0.02 (0.10)	0.01 (0.10)	-0.22 (0.21)	-0.22 (0.21)	-0.23 (0.21)	-0.18 (0.21)
Use of social media	0.05 (0.10)	0.02 (0.10)	0.05 (0.10)	-0.02 (0.10)	0.21 (0.21)	0.16 (0.21)	0.21 (0.21)	0.10 (0.22)
Model F	3.26	3.44	3.05	3.51	2.10	2.17	1.96	2.17
P<	0.001	0.001	0.001	0.001	0.016	0.011	0.024	0.01
R-square	0.392	0.422	0.393	0.444	0.293	0.316	0.294	0.331
Model df	16	17	17	18	16	17	17	18

Note a: Sample size is 98.

b: Significance levels: ** <0.01; * <0.05; # <0.10

As shown in Table 23, when using perceived performance as the dependent variable, only the UST is significant. The results suggest that, for joint ventures, strong ties are more important than weak ties. The correlation coefficient for the UST is 0.41, indicating that, if general managers of joint ventures used an additional unit of strong ties, the perceived performance of the hotel would increase by a 0.41 unit.

The only control variable that is significant in Model 23-8 is age. This model indicates that the general manager's age is negatively related to perceived performance for joint-venture hotels. Another variable has controlled for managers' hotel industry experiences. The negative relationship between age and perceived performance can be explained by the fact that the economy hotel industry is a relatively new sector in the hotel industry, and working experience in independent hotels has not offered much help to general managers in their new positions. For example, many senior managers were not familiar with modern marketing strategies such as on-line promotion and membership programs.

A strategic behavioral perspective on joint ventures proposed that firms establish joint ventures to maximize rents (Harrigan, 1988). Under the conditions of strategic fit, cultural fit, capability fit, and organizational fit, joint ventures can blend partners' competencies into a stronger organization than if each acts independently (Baughn, Neupert, Anh, & Hang, 2011; Cui, Ball, & Coyne, 2002). When forming joint ventures, foreign firms have been advised to make good use of local partners' *guanxi* to overcome cultural differences (Rahman, 2008; Ralston *et al*., 2006). Managers of joint ventures can tap into the strong connections to both local partners' domestic ties and foreign partners' international ties. In other words, joint ventures can benefit from the resource bases of both parties (Su, Sirgy, & Littlefield, 2003).

Buck, Liu, and Ott (2010) have found that the degree of management control by mainland Chinese investors and foreign investors with a Chinese cultural orientation is positively associated with long-term strategies within Chinese international joint ventures. The long-term orientation is related to Confucian values that can affect government relationships and trust-building. Many of the joint ventures that participated in this survey were founded by Chinese entrepreneurs who either obtained foreign investment or immigrated into a foreign country. These firms are not bothered as much by the culture distances as many Sino-Western joint ventures.

Liu *et al*. (2010b) found that executives of economy hotel chains founded by Chinese people mainly using foreign funding (an ownership type very close to the joint venture) did not show any particular pattern when the effects of strong and weak ties were compared. The insignificance of weak ties for joint ventures is a phenomenon that deserves further investigation. One possible reason for this is that developing and maintaining strong ties is expensive and time-consuming. The large proportion of time and energy spent on networking with strong ties may prevent managers of joint ventures from using weak ties to improve firm performance.

SOEs

The use of strong ties is not significant for SOEs in any of the models. These results do not support Hypothesis 3c, which proposes that managers' strong ties are positively related to firm performance, or Hypothesis 3d, which proposes that managers' strong ties are negatively related to firm performance for SOEs. In Chapter Two, both advantages and disadvantages of managers' strong ties for SOEs were discussed. It is very likely that those effects offset each other.

The only significant relationship was between RevPAR and the use of weak ties. The

information in Table 24 suggests that, for SOEs, managers' weak ties negatively affect firm performance, supporting Hypothesis 4c, which claims that managers' uses of weak ties are negatively related to firm performance for SOEs. The negative effects of network ties is consistent with a study of newly partially privatized firms in China, which found that politically connected CEOs underperform non-connected CEOs (Fan, Wong, & Zhang, 2007).

Table 24 Effects of Managers' Network Ties on RevPAR: Results for SOEs

	DV=RevPAR			
	Model 1 Coeff. (SE)	Model 2 Coeff. (SE)	Model 3 Coeff. (SE)	Model 4 Coeff. (SE)
UST		-8.86 (9.96)		15.11 (13.68)
UWT			-22.69* (9.98)	-35.05* (14.97)
Major road	3.73 (29.12)	2.07 (29.31)	18.44 (27.57)	29.28 (29.14)
Owned	-78.87 (80.15)	-76.47 (80.56)	-73.17 (73.79)	-74.15 (73.43)
Managed or franchised	-113.91 (79.68)	-119.07 (80.26)	-113.74 (73.32)	-104.84 (73.40)
Hotel working year	0.38 (1.82)	0.35 (1.82)	0.03 (1.68)	-0.11 (1.67)
Number of rooms	0.30 (0.21)	0.25 (0.22)	0.21 (0.20)	0.25 (0.20)
Male	23.59 (30.33)	13.00 (32.72)	8.28 (28.71)	18.00 (29.90)
Large city	-10.54 (39.20)	-13.35 (39.51)	-2.29 (36.25)	6.98 (37.04)
Up to associate degree	-3.61 (60.52)	4.50 (61.47)	2.37 (55.75)	-8.21 (56.29)
Bachelor and graduate degree	12.62 (58.71)	22.02 (59.92)	28.58 (54.48)	21.24 (54.61)
Age	0.20 (2.13)	0.13 (2.14)	0.13 (1.96)	0.21 (1.95)
Family members in hotel industry	15.91 (12.70)	17.73 (12.92)	18.78 (11.75)	17.24 (11.78)
Use of social media	-6.82 (15.27)	-6.58 (15.35)	-10.20 (14.13)	-12.44 (14.21)
Model F	1.68	1.62	2.14	2.12
P<	0.115	0.133	0.042	0.046
R-square	0.594	0.608	0.671	0.689
Model df	20	21	21	22

Note a: Sample size is 44.

b: Significance levels: ** <0.01; * <0.05; # <0.10

One possible explanation for the negative effects of weak ties here is that they are weak political ties. Government officials have power to assign resources, including financial capital, human capital, and physical capital, to SOEs. The relationships between SOE managers and officials are not balanced; there is more power located on the officials' side. When certain connections are not valid any more, managers still cannot terminate those relationships and allot resources to more productive relationships. Managers need to spend time and money to maintain those political relationships but benefit very little from them. Otherwise, the officials could punish those firms who treated them differently before and after obtaining favors.

The subgroup analysis results are summarized in Table 25. The results support the conclusion that the comparative importance of UST and UWT is contingent upon ownership: for joint ventures, UST is more important than UWT; for private firms, UWT is more important than UST; and for SOEs, only UWT is significant, but with a negative value, which makes the UWT less favorable than the UST for SOEs.

Table 25 The Importance of Strong Ties Versus Weak Ties: The Fixed Effects Models

	SOE	Private	Joint Ventures
UST			Perceived occupancy + (.10 level) Perceived service + Perceived performance +
UWT	Revpar1-	Perceived Service + Perceived Profit + (Model .10 level) Perceived performance + (Model .10 level)	

Comparing the Ranks of Network Ties

Additional information on the comparative importance of the four types of network ties was collected. Informants were asked to rank the four types of ties based on their importance in improving firm performance. Then, the two-dimensional table of (ownership types) * (rank of

SPT/SBT/WPT/WBT) was created and a chi-square test was conducted to compare the differences among managers of different ownership types. Because of the small number of exclusively foreign-owned firms, they were combined with joint ventures so that each cell of the cross table had more than five samples. No significant differences were found for SPT, SBT, and WBT. Only the rank of WPT showed some difference, supporting part of Hypothesis 6. The chi-square test was significant at a 0.10 level. Table 26 indicates that a relatively larger proportion of private and foreign firms consider weak political ties as the most important network ties, while a smaller proportion of SOEs rank it as the most important.

Table 26 Chi-square Test for the Rank of Weak Political Ties (WPT)

Ownership / Rank of WPT among SPT, WPT, SBT, and WBT / Frequency / Percent / Row Percent / Col Percent	SOE	Private	Foreign	Total
First	7 3.23 12.96 16.67	20 9.22 37.04 28.17	27 12.44 50.00 25.96	54 24.88
Second	10 4.61 14.93 23.81	30 13.82 44.78 42.25	27 12.44 40.30 25.96	67 30.88
Third	12 5.53 24.00 28.57	12 5.53 24.00 16.90	26 11.98 52.00 25.00	50 23.04
Fourth	13 5.99 28.26 30.95	9 4.15 19.57 12.68	24 11.06 52.17 23.08	46 21.20
Total	42 19.35	71 32.72	104 47.93	217 100.00

The hypotheses and results were summarized in Table 27.

Table 27 A Summary of Hypotheses and Results

Hypothesis	Results
Hypothesis 1a: Managers of foreign firms have fewer strong ties than those of state-owned and private firms.	Partially supported
Hypothesis 1b: Managers of state-owned firms have more strong ties than those of private firms.	Not supported
Hypothesis 2a: Managers' strong ties are positively related to firm performance in China.	Supported
Hypothesis 2b: Managers' weak ties are positively related to firm performance in China.	Supported
Hypothesis 3a: Managers' strong ties are positively related to firm performance for private firms.	Not supported.
Hypothesis 3b: Managers' strong ties are positively related to firm performance for joint ventures.	Supported
Hypothesis 3c: Managers' strong ties are positively related to firm performance for state-owned firms.	Not supported
Hypothesis 3d: Managers' strong ties are negatively related to firm performance for state-owned firms.	Not supported
Hypothesis 4a: Managers' weak ties are positively related to firm performance for private firms.	Supported
Hypothesis 4b: Managers' weak ties are positively related to firm performance for joint ventures.	Not supported.
Hypothesis 4c: Managers' weak ties are negatively related to firm performance for state-owned firms.	Supported
Hypothesis 5a: The positive relationship between managers' strong ties and firm performance is greater than that between managers' weak ties and firm performance for private firms.	Not supported
Hypothesis 5b: The positive relationship between managers' strong ties and firm performance is greater than that between managers' weak ties and firm performance for joint ventures.	Supported
Hypothesis 6: The ranking of managers' network ties will be significantly different for firms of different ownership types.	Partially supported

Major Functions of Managers' Network Ties

Among the four popularly mentioned functions of network ties, obtaining licenses and certificates or passing routine inspections was the one most frequently mentioned by the informants. On average, 38% of managers' network ties were helpful in this function. Since these are areas governed by political ties, the results reflect the importance of political ties in the transitional economy of China. Managers' network ties are also widely used to obtain business and acquire intangible assets such as human capital and knowledge. Nevertheless, an essential function of network ties discussed by many previous studies (e.g., Zhang, Souitaris, Soh, & Wong, 2008; Zhang & Wong, 2008), acquiring financial and physical capital, was not popular here. Less than 10% of network ties were claimed to make a difference in this function. The details are shown in Table 28. Other data on frequency (not shown) suggest that, among the 189 informants who reported the percentage of network ties that function in acquiring funding and physical assets, 97 considered no network ties to have ever helped them to acquire financial and physical capital. This could be due to the fact that obtaining financial capital was dealt with by chain-level executives, not property-level managers.

Table 28 The Percentage of Total Network Ties Helpful in Different Functions

Variable	N	Mean	Std Dev	Minimum	Maximum
Acquiring financial and physical capital	189	9.05	16.75	0	90.00
Acquiring human capital and knowledge	200	23.46	21.23	0	90.00
Obtaining more business	213	27.67	25.42	0	100.00
Obtaining licenses and certificates or passing routine inspections	212	37.62	31.11	0	100.00

The next chapter will conclude the study with an evaluation of the effectiveness of the research. Limitations of the study and topics for future research will also be discussed there.

CHAPTER FIVE

DISCUSSIONS AND CONCLUSION

This chapter begins with an evaluation of the effectiveness of the research. Measures employed to ensure the validity of the study are restated. Key findings from the research are summarized and discussed in the next section. A description of the contributions and limitations of the study follows. Then, a few topics for future studies are suggested.

The Effectiveness of the Study

The original research idea evolved over many years. During the process of finalizing the research proposal, the author read dozens of books, reports, research papers, and other articles to learn about the field. To understand the concepts and methods better, he participated in a week-long workshop on social network analysis organized by distinguished scholars in the field. The research questions were, in consequence, addressed from multiple theoretical perspectives such as social network theory, institution theory, and agency theory.

The author strictly followed scientific guidelines in preparing and executing the survey research, and many measures were taken to ensure the validity of the study. The major measure was to triangulate the results through a combination of data collection methods. The archival method was used to build background information on the economy hotel industry in China and the key players of the field. A preliminary field visit combined participant observation and interviews to develop the survey instruments and form a research framework. The survey research followed strict rules in sampling, data collection, and analysis. Interesting stories and live cases collected during the meetings with executives of economy hotel chains were used to explain the quantitative survey research.

For the survey, multiple measures of independent and dependent variables were collected and the convergence of the results showed consistency in the research findings. More than one analytical method was used so as to triangulate the results. For example, both ordinary least squares regression and ordinal logistic regression were used to analyze the effects of managers' network ties on perceived firm performance measurements. Both parametric methods such as MANOVA and non-parametric methods such as Kruskal-Wallis tests were used to compare the numbers of strong and weak ties among different groups.

Summary and Discussion of the Findings

Comparison of numbers of ties among firms of different ownership types

Chapter One listed six research questions of this study. The first one was: do managers of firms of different ownership types use different numbers of network ties? The study did find that managers of SOEs and foreign firms used different numbers of network ties.

On average, managers of SOEs had more strong ties and weak political ties than those of foreign firms. Because of their historical connections with officials in the government and trade associations, managers in SOEs were able to create and maintain more strong political ties than those of foreign firms. Historically, the bureaucratic system ensured free movement of human capital between government organizations and SOEs (Walder, 2011). The preliminary field visit found that this tradition was continuing. Many of the top executives of SOEs had previously been government officials. For example, the CEO of a mid-scale hotel group in Beijing was the director of the industrial management department of the China National Tourism Administration, and the president of a tourism group in a southern city was previously the deputy mayor of that city.

The reason for the differences in strong business ties could be that many state-owned economy hotels belong to a large state-owned tourism group due to the reform policy initiated by the government to agglomerate the state-owned hotel assets and put them under one umbrella. For example, the parent company for the state-owned economy chain Shidom is Beijing Tourism Group, with 40,367 employees and total assets of 28.55 billion RMB by the end of 2008, and the parent company for Garden Inn is Lingnan Group, whose core businesses include hotels, tourism, and food processing. Both parent companies are giant tourism groups formed by combining multiple tourism-related firms directed by local government. The many business conferences and social opportunities created by the groups helped property-level managers to have lots of strong business ties.

The lack of difference between managers of SOEs and private firms could be explained by the transfer of human resources between SOEs and private firms. This study collected data on the numbers of government bureaus, trade associations, and SOEs a manager had worked at before taking the current general manager position. As shown in Table 29, among the 78 private managers who answered this question, nearly half of them had worked in government, a trade association, or an SOE previously. During the 2009 field trip, the author met with the vice president of a private economy hotel chain in Beijing who had previously worked in an SOE. He said that many of his prior connections built during his career in the SOE were still active and helpful to his current private hotel chain.

Table 29 Number of Government Offices, Trade Associations, and SOEs Where Private Managers Previously Worked

Number of organizations worked at previously	Frequency	Percent
0	36	46.2
1	22	28.2
2	9	11.5
3	3	3.9
4	3	3.9
5	2	2.6
8	2	2.6
13	1	1.2

Another way to address this phenomenon is by examining the length of the hotel industry work experience of private managers, which is shown in Table 30. Managers in private economy hotel chains had an average of 10.5 years of hotel work experience, but the age of these private economy hotel chains was between one and eight years. Many of the managers had to work elsewhere in the hotel industry previously. As SOEs played important roles in the development of China's hotel industry (e.g., a large proportion of star-rated hotels are SOEs), it is very likely that the previous work experience of these private economy hotel managers was gained in an SOE. During the preliminary field visit in 2009, the author found many examples of private economy hotel chains hiring managers from SOEs. For example, a general manager of a private economy hotel in Shanghai had been working in China's first state-owned economy hotel chain, the JJ-Inn.

Table 30 The Hotel Industry Work Experience of Managers in Private Firms

Variable	N	Mean	Minimum	Maximum
Hotel working years	77	10.46	1.00	30.00

The effectiveness of managerial ties

The whole data set analysis tried to address the second and third research questions proposed in the introduction section. The second research question asked whether the effectiveness of network ties depended on the institutional environment of the firm. The study showed mixed results for the effectiveness of managerial ties. The results were also consistent with a previous study that showed the selection of output variables could be a contingent factor for the strong tie versus weak tie argument (Bruderl & Priesendorf, 1998).The regression results using perceived service quality and perceived performance as dependent variables indicated that both UST and UWT were positively related to firm performance. The fact that managers' network ties can help firms to improve service quality is not a surprise. For example, many products offered by hotels such as internet access, phone connections, and cable TV depend on good routine maintenance by suppliers. Good relationships with suppliers can ensure timely delivery of such services. Connections with government officials in charge of hotel inspections can give hotels useful suggestions on how to pass the routine inspections and maintain normal operation.

When using the subjective measurement of perceived occupancy rate and the objective measurement of RevPAR, only strong ties (strong political ties for RevPAR) were significant. The increase of RevPAR could be due to the fact that both strong ties and weak ties can bring more business to the hotels. One executive in Zhejiang province described how good relationships with government officials were able to bring conference and banquet business to

the hotel. He also listed a few major government bureaus with large purchasing power: the Committee for Development Planning, the Industrial and Commercial Bureau, the Finance Bureau, and the Tax Bureau. One typical sales strategy for many economy hotel chains is to visit all companies and organizations located within a certain distance from the hotel, offer discount rates to these business partners, and thus get more business from them.

The results on perceived profit suggested that, under certain conditions, only weak ties, not strong ties, positively affect firm performance. The reason only weak ties improved profit could be explained by the fact that the comparative costs of maintaining strong ties were higher. Even if both strong ties and weak ties could improve occupancy rate, the high costs related to maintaining strong ties might offset the benefits from strong ties. Another reason could be that many actors linked by strong ties could bring more business to the hotel, but they often asked for a high discount rate as a prerequisite to keeping the long-term business relationship. This might lower the profit margin of the hotel.

Based on the aforementioned results, it is hard to answer the third research question, whether strong ties are more important than weak ties in improving firm performance. A conclusion cannot be drawn when comparing the culture-based and institutional-based network views. However, most of the chain-level executives the author met during the field trip were inclined to the culture-based view and said that managerial ties would continuous to play important roles in China, though the extent to which firms could benefit from managerial ties might change with a more established institutional environment.

Using the fixed effects model, the results are very different from the OLS regressions. Only the UST is positively related to the perceived service quality of the firm, showing that

strong ties are more important than weak ties. However, the effects of network ties on all other performance measurements are insignificant.

Ownership type as a contingent factor

The subgroup analysis provided answers to the fourth research question, how does the comparative importance of managers' strong ties and weak ties differ among SOEs, private firms, and joint ventures? The analysis suggested that ownership type was a contingent factor for the strong tie and weak tie paradox. For private firms, only UWT was positively related to firm performance. During my preliminary field trip, the manager of a private firm told a story about how weak ties had helped his firm. A male adult registered guest stayed in a 7th floor room of his hotel. The guest had just had a fight with his wife at home. His wife rushed into his hotel room and locked the door. After a fierce quarrel with her, the male guest kicked the room window open and jumped out. He landed on the top of a car and died. Confronted with charges such as unsafe facilities and ignoring visitor registration policies (his wife was not registered when she rushed into the hotel room), the hotel was potentially liable and faced the possibility of high fines or a penalty of suspension. In addition, the damaged car's owner brought TV reporters and threatened to broadcast news that could negatively affect the hotel. Helped by an acquaintance from the government, the hotel was able to settle the issue at very low cost and avoided damages to its brand.

From previous discussion, we know that both strong ties and weak ties can bring benefits to the firms, but why is the use of strong ties not significant for private firms? One possible reason is that, although private firms can benefit from managers' network ties, they need to spend more resources to cultivate and maintain their strong ties due to their relatively weak status in the economy's structure. Ahlstrom, Bruton, and Yeh (2008) suggested that private firms

had to cultivate relationships with government officials when operating under ineffective formal institutions. Tsang (1998) suggested that the status of the partners affected the value of *guanxi*. During the author's field visit, some executives of private firms stated their concern that they were forced into some of the relationships. "Red envelopes" (cash gifts) were needed to obtain certain licenses or pass the annual inspection (Liu *et al*., 2011). One private owner of an economy hotel chain got so tired of the frequent requests from political connections that he tried to sue the officials who forced him to bring gifts. Although he won the lawsuit, the high costs related to the more strict inspections that followed put him in a much worse position. Chen (1995) suggested that many firms consider network ties a burden and try to avoid some connections (Fan, 2002a).

For joint ventures, only UST was positively related to firm performance, indicating that strong ties were more important than weak ties. In one story collected during my field trip, an executive of a joint venture economy hotel chain used a variety of strong ties to improve firm performance. Before the opening of one hotel, a local government official who was his friend gave him a very useful suggestion on how to deal with government inspections. By taking that suggestion, the hotel manager fixed a serious defect of the hotel and saved a huge amount of money on interior decoration. This hotel manager was also informed, while having dinner with his friend from the tourism bureau, of a government policy that would assign incentives to firms using international brands. He applied for the incentive and successfully obtained 100,000 RMB for one of his hotels and 30,000 RMB for another. This strong tie with the government official had been created years earlier when he was a general manager of a state-owned economy hotel.

The major reason for the effectiveness of the strong ties of managers of joint ventures may be that joint ventures can benefit from strong network connections of both domestic and

foreign partners. Another possible reason for the effectiveness of joint venture managers' strong ties is that joint ventures cherry-pick the best general managers with strong connections at SOEs and private firms. Many joint ventures offer higher salaries and benefits to their managers and employees. Those managers who have strong business and political connections will use these resources to bargain for better jobs, and some will change their jobs and work for joint ventures. One chain-level executive of an SOE expressed worry that his chain was unable to attract high quality human capital from firms of other ownership types and was threatened with losing high-level managers to other firms.

For SOEs, the use of weak ties was negatively related to firm performance. This was consistent with the hypothesis derived from agency theory and addressed the fifth research question as to whether managerial ties always positively affect firm performance. Previous studies have found that network ties have not always brought positive impacts (Braendle, Gasser, & Noll, 2005; Fan, 2002b; Siegel, 2007), but it is the strong ties that negatively affect firm performance. The reason is the inertia or stickiness of strong ties. Doing business with friends can take away room for maneuvering (Batjargal, 2003). In a transitional economy such as China, with its very dynamic environment, managers need to keep terminating unused ties and allot resources to building new ties. In general, when weak ties become invalid, managers can easily break these ties without any additional cost. However, this is not true when managing strong ties.

One major reason for the negative impacts of political ties is that, sometimes, hotels have to keep unqualified employees introduced by government officials. Network ties play an essential role in acquiring human capital (Liu, *et al*., 2010a), but unqualified employees referred by government officials may negatively affect firm performance. One example in the literature of how weak political ties negatively affected a firm because of human capital referral can

summarize this problem (Liu *et al*., 2011). A hotel manager in Shanghai hired a lady referred by her relative who was a local government official. One day, the new employee had an argument with her colleague and slapped that person in the face. Following company policy that any fighting would result in dismissal from the job, the manager fired her. This event destroyed the relationship between the manager and the official. Afterwards, the official created a lot of trouble for the hotel.

This study suggested that the use of weak ties was negatively related to firm performance for managers of SOEs. In Chapter Four, the author suggested that the negative effects of weak ties could be more specifically caused by weak political ties. In the relationships between government officials and hotel managers, less power is located on the managers' side. SOE managers cannot terminate useless political ties even when the connections are weak. One executive from an SOE said that you could not treat a retired official to cold tea (a traditional Chinese saying that refers to bad treatment of a person who has helped one when one does not need his/her help any more). Fan (2002b) suggested that the business-to-government *guanxi* is not reliable and that the costs of cultivating those relationships may outweigh the potential benefits.

Many weak business ties are between economy hotels and their parent companies or among firms belonging to the same group. Transactions are then dominated by political tasks, not financial performance (Sheng, Zhou, & Li, 2011). One CEO of a state-owned economy hotel chain suggested that, when hosting guests such as those from the government, hotels did not benefit very much financially. Sometimes they needed to make extra efforts to satisfy the customers from the government with high quality services at deeply discounted prices.

Contributions of the Study

Contributions to theory

This study provided new insights for resolving the paradox of social network theory regarding the relative importance of strong ties and weak ties. It proved that strong ties and weak ties were distinct phenomena showing different characteristics, and ownership type was a new contingent factor that reconciled the comparative effects of strong ties versus weak ties. The effects of managers' strong ties and weak ties on firm performance differ among firms of different ownership types. Managers' strong ties are more important than weak ties for joint ventures, but weak ties are more important than strong ties for private firms. These results are consistent with those derived from the social network theory and social exchange theory. Managers' weak ties have negative effects on firm performance for SOEs, supporting the agency theory.

The study provided mixed results as regards the culture-based and institution-based network views. Gold, Guthrie, and Wank (2002) compared the two literature groups on *guanxi (network).* One perspective takes *guanxi* as an important component of Chinese culture originating in Confucianism philosophy and considers "that understanding and successfully managing interpersonal relationships are essential elements of being authentically 'Chinese,' regardless of time or place" (Gold *et al*., 2002, p.10). For example, King (1985) described *guanxi* as essential stock knowledge for Chinese adults to use in managing their everyday life. If the culture-based network view is correct, managers' network ties will always be effective as long as they are in a Chinese setting.

The other perspective sees *guanxi* as a response to certain institutional and historical conditions in China and a mechanism for dealing with the incompleteness of the system of law

and regulation (Zheng, 1986). Wank (1999) found that private businessmen used *guanxi* to steer through institutionally uncertain environments and needed assistance from government officials to obtain license, resources, and other favors. However, in this view, the importance of *guanxi* will gradually decline with development of a more formalized institutionally system (Fan, 2002b).

The information for this study was about economy hotels in 2009, 30 years after China's reform and open door policy, leading to a more and more established institutional system. The effectiveness of both strong ties and weak ties when perceived service quality and perceived performance are dependent variables tends to support the culture-based network view that the impacts of social networks have not diminished in today's economy. However, neither strong ties nor weak ties are effective when using occupancy rate to measure firm performance, and this supports the institutional-based network view that managers' network ties are ineffective with a more established institutional system. The results using perceived profit as a performance measurement support Peng and Zhou's (2005) intermediate phase assumption, where only weak ties are effective.

Discussions with top executives of economy hotels chains showed that not all effects of network ties could be captured by this study with the current research design. For example, managers' strong political ties can help hotels to get licenses more quickly. This positive effect happens before the opening of a hotel and cannot be measured by occupancy rate, RevPAR or perceived service quality. Another example is that some economy hotel chains acquire properties with lower prices with the support of managerial ties; again, this is a positive effect not captured in the results of this study. The data collection process of this study is itself an example of the importance of network ties. Without referrals, the author would have had no chance to collect

information from general managers, even if he had visited their properties in person. When referred by friends from the government or trade associations, the author not only obtained opportunities to meet with top executives of economy hotels/hotel chains, but also was treated occasionally to fancy dinners.

Contributions to practice

Since network ties still play important roles in today's China, managers are encouraged to use a networking strategy to obtain licenses and certificates, acquire businesses, human capital, and knowledge, and to obtain financial capital and physical assets. However, firms of different ownership types should use different networking strategies. For example, the effects of strong ties may be stronger for joint ventures and less effective for private firms. For joint ventures, managers can develop and maintain strong ties to claim benefits from network ties. If the costs of developing and maintaining strong ties are similar to those for weak ties, managers are encouraged to direct time and resources to strong ties, because the extent to which firms can benefit from managerial ties is higher for strong ties than for weak ties. However, private firms should direct their resources to developing weak ties, because weak ties are more effective for them than strong ties. SOEs need to set up better governance systems so that managers will weigh the benefits and costs of networking based not on their own personal interests, but on the firms' benefits.

Limitations of the Study

The research confined itself to entrepreneurial economy hotels in the transitional economy of China. The results may not be informative for firms in developed countries because they face different institutional environments and ownership type may not be an important factor in many developed Western countries. It has been well recognized that entrepreneurship differs

in developed economies and transition economies (Puffer, McCarthy, & Boisot, 2010). Moreover, some of the findings may not apply to firms which are not in their entrepreneurial periods.

Since this is a study done on a single industry, additional caution is needed when extending the conclusion to other industries. The hotel industry was assigned to the "special industries" category in China. The effects of network ties in the hotel industry may differ from those in other industries in such a way as to strengthen the effects of political ties for the hotel industry. This should be understood in light of the complicated processes of opening a hotel in China as described by Liu *et al*. (2011, p.8):

> The procedure of opening a hotel, for example, is not as simple as many might think. Disregarding many steps, such as buying/leasing land or building a hotel, even with an established hotel ready to serve, operators still have to obtain licenses or permits from multiple government bureaus. Typically, before the opening of a hotel, an operator needs to obtain permission to use the company name from the Industrial and Commercial Bureau. Then, the operator needs to get a sanitation license from the Health Bureau (for a hotel with food and beverage services), a license for special industry from the Police Department, a pollution discharge license from the Environmental Protection Bureau, and a fire safety prevention certificate from the Fire Control Department. After registering and obtaining a business license at the Industrial and Commercial Bureau, the operator needs to apply for a tax code certificate and complete tax registration at the Tax Bureau. Foreign firms need to go through another layer of government: the Municipal Bureau of Foreign Trade and Economic Cooperation. In addition, to join the hotel star-rating system, an operator needs approval from the local tourism bureau for 1-4 star properties and the national tourism bureau for 5-star hotels.

Though the researcher sought to follow scientific research disciplines, the study exhibits some weaknesses due to a variety of constraints. For example, it did not get any responses from foreign managers. Although the proportion of foreign managers is very small due to the high cost

of their labor, the author is aware, based on information collected during the preliminary field visit, that some economy hotel managers are foreigners. In addition, there were too few exclusively foreign-owned hotels. This disabled the subgroup tests with this group.

Some problems could have been solved by a better research design. For example, the survey instrument collected data on total revenue of the hotel instead of room revenue; this may inflate RevPAR for some economy hotels. During the preliminary field visit in 2009, the author found that most economy hotels either do not offer food and beverage (F&B) services or only offer breakfast, which just contributes a very small proportion to the total revenue. However, when very high RevPar numbers for some hotels were detected, the author realized that there were a few economy hotels that offered services such as F & B and recreation. Although remedial measures were taken, such as calling some managers to collect data on room revenue, some of the data on this variable are still inflated.

How to define and measure strong ties and weak ties in survey research is a challenge. This study used ties with friends and ties with acquaintances to define those two concepts. However, the distinctions between the group of friends and the group of acquaintances are somewhat ambiguous. Informants may use different standards to define their own friends and acquaintances. A few executives expressed their worries during the field visit and indicated that sometimes they could not clearly put some people into a certain category. The question becomes more complicated when considering the dynamic characteristic of the definition. Some managers continuously make efforts to turn acquaintances valuable to their business into friends. Some friends who have helped the informants before may become acquaintances gradually if no routine communication is maintained.

If more resources had been available, the data collection process could have been improved. Sheng *et al*. (2011) have suggested that using on-site interviews instead of mail surveys can generate more valid information because it ensures collection of information from the proper respondents and the interviewers can explain concepts and questions that may create confusion for the informants. However, the small amount of research funding available could not cover the costs for on-site interviews. Due to time limitations, the author did not get a chance to send the final results to the informants and collect their feedback. More informative explanations and rationales could have been provided with this additional step.

Unanswered Questions and Future Topics

Some interesting results were found that were not same as those of previous studies and were not predicted by current theories. For example, negative effects of network ties were reported by a few studies, but most of them concerned strong ties. Because it is relatively hard to terminate unwanted strong connections with certain groups, the inertia leads to stickiness of the structure and hinder managers from formulating desired new ties. The current study found that some weak ties were also negatively related to firm performance for SOEs. Additional studies on this phenomenon could lead to productive findings.

The two instrument variables proposed at the beginning of this study do not correlate highly with the independent variables, so they did not pass the relevance test. Better instrument variables are needed to correct the error caused by the reverse causal relationship and answer research question six, whether there are any causal relationships between managers' network ties and firm performance. The author has one potential instrument variable in mind, the loss of a cell phone. The loss of a cell phone means losing contact with many weak ties, and it is a totally random event that would not correlate with other variables in the model.

Another question has to do with the blurring of boundaries among firms of different ownership types. With the growth of publicly listed companies whose shares were owned by a variety of owners with diverse background, it became harder and harder to put a firm in one of the four ownership types. In addition, there are cases where entrepreneurs strategically blur the ownership boundaries to deal with environmental uncertainty and resource scarcity (Tan, 2002). For example, Estrin & Prevezer (2011) found cases where entrepreneurs registered a private enterprise as state-owned to disguise the private ownership before private firms were protected by the institutions. Fake foreign firms were once a popular phenomenon in China when the government offered tax and other benefits to foreign firms. Some private firms and SOEs transferred their money overseas and invested it back into China under the name of a foreign company. The situation has been complicated by the existence of many Chinese who founded and developed private firms in China and then obtained citizenship in another country and returned to China. Walder (2011) has proposed a new typology suggesting four different sectors just for domestic firms: the state-owned sector, the privatized state sector, the transactional sector, and the entrepreneurial sector. Tihanyi, Griffith, and Russell (2005) have suggested that cultural distance could affect corporations' strategies and performance. Even for exclusively foreign-owned firms, the effects of network ties may differ because of the different cultural distances between their home countries and China. How to establish a clearly defined ownership typology and research with a refined ownership typology would make good topics for future research and could bring new findings to this field.

This paper mainly addresses research questions through social network theory, institutional theory, and agency theory. Other studies have addressed similar questions through other theories, such as the resources-based view and transaction cost theory (Krug &

Hendrischke, 2008; Tsang, 1998; Wu, Wu, & Rui, 2010). The final suggestion here is to study the effects of managers' network ties through new theoretical perspectives.

During the preliminary field visit, many top executives of economy hotel chains quoted a popular saying to emphasize the importance of network ties, "network ties can improve productivity." Network ties will remain an important factor in improving firm performance, at least under the conditions of a less established institutional environment. This study proved that the comparative effects of managers' strong ties versus weak ties differ among firms of different ownership types and suggested that managers use networking strategies that are most effective for their firms.

APPENDIX A

Survey Instrument for Web-based Survey: English Version

Dissertation English

1. Consent form

You are being asked to take part in my dissertation study, which explores the effects of managers' network ties on hotel performance. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

What the study is about: The purpose of this study is to learn whether the effects of managers' network ties on hotel performance differ among economy hotels of different ownership types in China. You need to have worked as a general manager for the current hotel since before January 1, 2009, to take part in this study.

What you will be asked to do: If you agree to participate in this study, you will be asked to fill out a survey questionnaire. The survey will include questions about your background information, your hotel's performance, and your networking patterns. The survey will take 20 to 25 minutes to complete.

Risks and benefits: I do not anticipate any risks to you participating in this study other than those encountered in day-to-day life.

I will offer you a report on the results of this research which may provide useful information on how economy hotel managers use network ties in general and the most effective network mixes for managers in state-owned, private, and foreign economy hotels.

Compensation: Each participant will either receive a Cornell University souvenir for sure or be entered in a lottery to win ¥1,000 in Cash (one winner for every 30 participants).

Your answers will be confidential. The records of this study will be kept private. In any sort of report I make public I will not include any information that will make it possible to identify you or your hotel. Research records will be kept in a locked file; only the researcher will have access to the records.

Taking part is voluntary: Taking part in this study is completely voluntary. Although answering all the questions on the questionnaire will be very helpful to my study, you still may skip any question that you do not want to answer. If you decide to take part, you are free to withdraw at any time.

If you have questions: The researcher conducting this study is Zhaoping Liu. Please ask any questions you have now. If you have questions later, you may contact Zhaoping Liu at ZL49@cornell.edu or at 001-607-2554921. Domestic phone number: 15810248468. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) at 1-607-255-5138 or access their website at http://www.irb.cornell.edu. You may also report your concerns or complaints anonymously through Ethicspoint or by calling toll free (in the U.S.) at 1-866-293-3077. Ethicspoint is an independent organization that serves as a liaison between the University and the person bringing the complaint so that anonymity can be ensured.

You can print a copy of this form to keep for your records.

Statement of Consent: I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Printed name of the researcher: Zhaoping Liu

If you decide to participate, please click "next" after signing your name.

* 1. Signature

Name

Date

2. Background of the Economy Hotel and the General Manager

Dissertation English

1. When was the hotel opened?

Year (####)

Month (1-12)

2. What is the ownership type of the hotel?

- ◯ Stated-owned
- ◯ Private
- ◯ Exclusively foreign-owned
- ◯ Joint-venture

Other (please specify)

3. Is this hotel affiliated with a hotel chain?

- ◯ Yes
- ◯ No

3. Background of the Economy Hotel and the General Manager (2)

1. In China, how many hotels were affiliated with this hotel chain by the end of 2009? (If you don't have an exact number, your best estimate is fine)

Number of hotels

2. Please select the operational model of this hotel (check one)

- ◯ Owned/leased (owned/leased and operated by the hotel chain)
- ◯ Managed (owned/leased by another party, but managed by a team from the hotel chain and using the hotel chain brand)
- ◯ Franchised and managed by owner (operated independently by the owner himself/herself but using the hotel chain brand)
- ◯ Franchised and managed by someone other than the owner (operated independently by an owner-hired professional mamager but using the hotel chain brand)

4. Background of the Economy Hotel and the General Manager (3)

1. Which category best describes the location of the hotel? (check one)

- ◯ Urban
- ◯ Suburban

2. Which category best describes the location of the hotel? (check one)

- ◯ Major traffic route (one-way two-lane road, two-way four-lane road, or road with more lanes)
- ◯ Side road (fewer than two lanes going one way)

3. What is your educational attainment?

- ◯ Lower than a high school diploma
- ◯ High school diploma
- ◯ Some college or an associate degree
- ◯ Bachelor's degree
- ◯ Graduate degree and above

5. Background of the Economy Hotel and the General Manager (4)

1. How long have you been working in any industry (number of years and/or months)?

2. How long have you been working in the hotel industry ? (Number of years and/or months)

6. Background of the Economy Hotel and the General Manager (5)

1. How many close family members (parents, spouse, siblings, and/or children) were in the hotel industry before you started to work in your current general manager position?

Number of family memebers

2. In how many government organizations, non-government organizations, and/or state-owned enterprises had you served before you started your current job?

Number of government organizations

Number of non-government organizations

Number of state-owned enterprises

3. Please pick 1-3 of your most frequently used social network sites/tools and report the number of friends/acquaintances on each site/tool.

MSN messenger

Skype

QQ

Facebook

Linkedin

Xiaonei/Renren

Twitter

Blog

Kaixin

4. Please report the amount of time (number of minutes) spent on each site/tool you picked in the previous question on a typical day.

MSN messenger	
Skype	
QQ	
Facebook	
Linkedin	
Xiaonei/Renren	
Twitter	
Blog	
Kaixin	

7. Hotel Performance Measures

1. How many rooms did the hotel have by the end of 2009?

Rooms

2. What was the total revenue of the hotel in 2009? RMB

Total revenue (¥)

3. How many rooms did the hotel sell in 2009?

Number of rooms sold in 2009

4. What was the net profit of the hotel in 2009? RMB

Net profit (¥)

5. What were the hotel's start-of-year assets in 2009? RMB

Assets (¥)

8. Hotel Performance Measures (2)

1. Rate your hotel's record in 2009 compared to your direct competitors.

	the lowest	much lower	lower	comparable	higher	much higher	the highest
Service quality	◯	◯	◯	◯	◯	◯	◯
Guest satisfaction ratings	◯	◯	◯	◯	◯	◯	◯
Occupancy rate (your best estimate is fine)	◯	◯	◯	◯	◯	◯	◯
Average room rate (your best estimate is fine)	◯	◯	◯	◯	◯	◯	◯
Gross profit (your best estimate is fine)	◯	◯	◯	◯	◯	◯	◯

9. General Managers' Network Patterns

How do friends differ from acquaintances?

Acquaintances are people you know and with whom you only have reciprocal relationships. In general, you enter into the relationship non-voluntarily (e.g., with colleagues or neighbors), the emotional intensity between you is low, and

your relationships with them are oriented by gain-and-loss calculations.

Friends are those people you freely choose from among acquaintances and with whom you have both reciprocal and altruistic relationships. The emotional intensity between you is higher than that with acquaintances. The relationships between you and your friends are emotion-oriented and you trust friends more than acquaintances.

Please check the box best describing the extent to which you have utilized personal network ties to enhance the success of your business during the year 2009.

1. Officials in the government, industrial bureaus, regulatory and supporting organizations (such as tax bureaus, state banks, and commercial administration bureaus), and trade associations who are your friends

	utilized very little						utilized very extensively
Officials who are your friends	◯	◯	◯	◯	◯	◯	◯

2. Managers at buyer firms, supplier firms, and competitor firms who are your friends

	utilized very little						utilized very extensively
Managers who are your friends	◯	◯	◯	◯	◯	◯	◯

3. Officials in the government, industrial bureaus, regulatory and supporting organizations (such as tax bureaus, state banks, and commercial administration bureaus), and trade associations who are your acquaintances

	utilized very little						utilized very extensively
Officials who are your acquaintances	◯	◯	◯	◯	◯	◯	◯

4. Managers at buyer firms, supplier firms, and competitor firms who are your acquaintances

	utilized very little						utilized very extensively
Managers who are your acquaintances	◯	◯	◯	◯	◯	◯	◯

10. General Managers' Network Patterns (2)

1. How many network ties helped you in improving firm performance in 2009? (Enter a number)

Officials in the government, industrial bureaus, regulatory and supporting organizations (such as tax bureaus, state banks, and commercial administration bureaus), and trade associations who are your friends

Officials in the government, industrial bureaus, regulatory and supporting organizations (such as tax bureaus, state banks, and commercial administration bureaus), and trade associations who are your acquaintances

Managers at buyer firms, supplier firms, and competitor firms who are your friends

Managers at buyer firms, supplier firms, and competitor firms who are your acquaintances

2. Among all network ties you mentioned in the previous question, approximately what percent of the total number was helpful in each of the following four functions? (Enter a number between 0% and 100%)

Acquiring financial and physical capital

Acquiring human capital and knowledge

Obtaining more businesses

Obtaining licenses and certificates or passing routine inspections

3. Please rank each type of network tie in terms of its importance for improving your firm's performance (1-4: 1 is the most important, 4 is the least important).

Ties with officials who are your friends

Ties with managers at relevant firms who are your friends

Ties with officials who are your acquaintances

Ties with managers at relevant firms who are your acquaintances

11. Other Information

1. Demographic information

Your name:

Hotel name:

Address 1:

Address 2:

City/Town:

State/Province:

ZIP/Postal Code:

Email Address:

Phone Number:

2. Your gender

Male

Female

3. Your age

Your age

4. Your nationality

5. If your nationality is not Chinese, how long have you been in China?

Number of years

6. How do you want to receive your incentives? (check one)

◯ Receive a Cornell University souvenir for sure

◯ Be entered in a lottery to win ¥1,000 in cash (one winner for every 30 participants)

APPENDIX B

Survey Instrument for Web-based Survey: Chinese Version

Dissertation Chinese

1. 同意书

您被邀请参加我的博士论文研究，这是一项关于经理人员的网络关系对饭店经营效益影响的研究。在您同意参加此项研究前请仔细阅读此表格并询问任何有关的问题。

关于此项研究的内容：此项研究的目的是考察在中国，经理的网络关系对饭店经营效益的影响是否因饭店所有制的不同而有所差异。您必须是在2009年1月1日之前开始担任目前所在饭店的总经理方可参加本研究。

您参加此研究需要做什么：如果您同意参加此研究，您将需要填写一份调研问卷。问卷的问题包括您的背景情况，您所在饭店的经营效益情况和您的关系网络模式。填写整个问卷约需要20-25分钟。

风险和收益：我认为参与本项研究不会给您带来任何超出日常生活中所能遇到的风险。

研究结束后，我会向您提供一份研究结果报告。报告中将提供关于经济型饭店经理如何使用网络关系的情况，并将包括何种关系组合分别对国有、民营和外资经济型饭店的经理更有效的结论。

补偿：每位参与者将获得一件康奈尔大学的纪念品，或者参与抽奖以赢得1000元人民币的现金（每三十位参与抽奖者中产生一名获奖者）。

您的回答将对外保密：本项研究的记录将不对外公开。在公开发表的任何报告中，我保证其中不会包含有可以分辨出您个人或所在具体饭店的信息。所有记录将被保存在上锁的文件柜中，只有研究者本人可以接触到原始材料。

参与此研究完全自愿：参与本项研究完全出于本人自愿。尽管回答问卷中全部的问题会对我有更大的帮助，但您可以跳过任何您不想回答的问题。如果您决定参与本研究，您仍可以随时决定退出。

如果您有问题：开展本项研究的人员是刘赵平。请提出任何疑问。您如果在参与过程中有任何问题，请与刘赵平联系。电子邮箱：ZL49@cornell.edu; 电话：001-607-2554921。国内电话：15810248468。如果您对于自己作为参与者的权益有任何问题或担心，您可以和康奈尔大学的伦理审查委员会联系。电话：001-607-255-5138。或登录他们的网站：http://www.irb.cornell.edu。 您也可以把您的担心或投诉匿名通过Ethicspoint反映或拨打（美国国内）免费电话1-866-293-3077。Ethicspoint是一个负责沟通投诉人与大学关系的组织，所以可以保证整个过程是匿名的。

您可以打印一份此表格作为档案记录。

同意声明：我已经读过以上的信息，所有的问题也得到解答。我同意参与此项研究。

调研人员姓名 （正楷书写）：刘赵平

如果您同意参与，请在签名后点击“下一步”

* 1. 签名

姓名

日期（年/月/日）

2. 经济型饭店及总经理的背景情况

1. 本饭店何时开始营业?

何年（####）

何月 （1-12）

2. 本饭店的所有制形式为

- ◯ 国有
- ◯ 民营
- ◯ 外资独资
- ◯ 中外合资

其它 (请注明)

3. 本饭店是否归属于某个饭店连锁集团

- ◯ 是
- ◯ 否

3. 经济型饭店及总经理的背景情况 (2)

1. 到2009年末，本饭店所归属的饭店连锁集团共在中国共有多少饭店？（如果您不知道确切数字，你的最佳估计亦可）

饭店数量

2. 请选择本饭店的管理模式 （四者选一）

- ◯ 拥有或租赁（直营）（连锁集团拥有/租赁并直接经营）
- ◯ 委托管理 （另一方拥有或租赁物业，但使用饭店连锁集团品牌并由连锁集团派出的管理团队经营）
- ◯ 业主直接参与管理的特许经营 （由业主本人独立经营饭店但使用饭店集团的品牌）
- ◯ 非业主管理的特许经营 （由业主雇佣的职业经理人独立经营管理但使用饭店集团的品牌）

4. 经济型饭店及总经理的背景情况 (3)

1. 下面哪种情况准确描述了本饭店的地理位置情况？（两者选一）

- ◯ 市区
- ◯ 郊区

2. 下面哪种情况准确描述了本饭店的地理位置情况？（两者选一）

- ◯ 位于交通干道旁边（单向双车道或双向四车道及以上）
- ◯ 偏僻巷道（低于单向双车道或双向四车道）

3. 您拥有什么学历？

- ◯ 低于高中
- ◯ 高中学历
- ◯ 上过大学（但未毕业）或大专学历
- ◯ 大学本科学历
- ◯ 研究生及以上学历

5. 经济型饭店及总经理的背景情况 (4)

1. 您从事工作有多久？（多少年多少月）

2. 您从事饭店业工作有多久？（多少年多少月）

6. 经济型饭店及总经理的背景情况 (5)

1. 在您开始目前的总经理工作之前，您共有几位家庭成员（指父母、配偶、兄弟姐妹和子女）在饭店业工作过？

饭店业家庭成员数量

2. 在从事目前的工作之前，您共在多少个政府机关、事业单位或国有企业单位工作过？

政府机关数量

事业单位数量

国有企业数量

3. 请挑选1-3种您最常使用的社交网络网站/工具并且填写你在那些网站/工具上的朋友/熟人数量

MSN即时通

Skype

QQ

Facebook

Linkedin

校内/人人

微博

博客

开心网

4. 就你在上个问题中挑选的1-3种社交网络网站/工具，请填写你一般每天在那些网站/工具里所花费的时间（分钟数）

MSN即时通 ☐
Skype ☐
QQ ☐
Facebook ☐
Linkedin ☐
校内/人人 ☐
微博 ☐
博客 ☐
开心网 ☐

7. 饭店经营业绩指标

1. 在2009年末，本饭店经营用客房共有多少间？

客房数 ☐

2. 2009年本饭店总营业收入是多少元？

总收入（元） ☐

3. 2009年本饭店的全年售出房间总数为多少间？

全年售出房间总数 ☐

4. 2009年本饭店净利润是多少元？

净利润 （元） ☐

5. 2009年年初，本饭店资产总额为多少元？

饭店资产 （元） ☐

8. 饭店经营业绩指标 （2）

1. 请根据2009年和你们的直接竞争对手相比的情况给本饭店打分

	最低	很低	低	一样	高	很高	最高
服务质量	◯	◯	◯	◯	◯	◯	◯
客户满意度	◯	◯	◯	◯	◯	◯	◯
出租率（如果没有数据，你的最佳估计也可）	◯	◯	◯	◯	◯	◯	◯
平均房价（如果没有数据，你的最佳估计也可）	◯	◯	◯	◯	◯	◯	◯
毛利润（如果没有数据，你的最佳估计也可）	◯	◯	◯	◯	◯	◯	◯

9. 总经理的关系网络使用模式

如何区分朋友和熟人？

熟人是指和你认识并且相互之间只有利益关系的人。一般来说，你无法主动选择开始或中断和熟人之间的联系（如同事和邻居等），你们之间的情感紧密程度较低，你们之间的交往更多地考虑利益得失。

朋友是指你从熟人当中主动选择加强交往而形成的关系。你和朋友之间利益关系和忘我的利他主义关系并存。你和朋友之间的情感紧密程度较高，你们之间的交往更多地考虑情感交流，你和朋友之间的信任度也高于熟人。

请选择2009年您在企业经营中使用个人关系网络来提高经营效益的程度

1. 政府、行业主管部门、其他相关政府部门 （如税务、工商、国有银行等）和行业协会中的朋友

	极少使用						极大量使用
政府官员中的朋友	○	○	○	○	○	○	○

2. 供应商、客户和同行的管理人员中的朋友

	极少使用						极大量使用
企业管理人员当中的朋友	○	○	○	○	○	○	○

3. 政府、行业主管部门、其他相关政府部门 （如税务、工商、国有银行等）和行业协会中的熟人

	极少使用						极大量使用
政府官员中的熟人	○	○	○	○	○	○	○

4. 供应商、客户和同行的管理人员中的熟人

	极少使用						极大量使用
企业管理人员当中的熟人	○	○	○	○	○	○	○

10. 总经理的关系网络使用模式 （2）

1. 2009年，您的多少网络关系在提高饭店效益方面发挥过作用（请填入数字）

政府、行业主管部门、其他相关政府部门 （如税务、工商、国有银行等）和行业协会中的朋友	
政府、行业主管部门、其他相关政府部门 （如税务、工商、国有银行等）和行业协会中的熟人	
供应商、客户和同行的管理人员中的朋友	
供应商、客户和同行的管理人员中的熟人	

2. 在您上个问题提到的全部网络关系当中，在以下的四项功能中发挥过作用的关系大约各占总数的多大百分比？（请填入一个0% 到100%之间的数字）

获取资金及有形资产	
获取人力资源和知识	
带来更多生意	
帮助获得执照、证书及通过日常检查	

3. 请根据以下四种网络关系对提高企业经营效益的重要程度排序。（1为最重要，4为最不重要）

政府官员中的朋友关系	
与相关企业管理人员的朋友关系	
政府官员中的熟人关系	
与相关企业管理人员的熟人关系	

11. 其它信息

Dissertation Chinese

1. 个人联系方式

您的姓名:

饭店名称:

邮政地址 1:

邮政地址 2:

城市/县/镇:

省/市/自治区:

邮政编码:

电子邮箱地址:

电话号码:

2. 您的性别

- ◯ 男
- ◯ 女

3. 您的年龄

您的年龄

4. 您的国籍

5. 如果您的国籍不是中国，那么，您到中国有多久了？（多少年）

6. 您选择哪种获得奖品的方式？（两者选一）

- ◯ 得到一件康奈尔大学的纪念品
- ◯ 参与抽奖赢得1,000元的现金 （获奖概率为三十分之一）

APPENDIX C

Picture of Survey Incentives


LEEDS

REFERENCES

Adler, P. S., & Kwon, S. (2002). Social capital: Prospects for a new concept. *Academy of Management Review, 27*(1), 17-40.

Ahlstrom, D., Bruton, G. D., & Yeh, K. S. (2008). Private firms in China: Building legitimacy in an emerging economy. *Journal of World Business, 43*(4), 385-399.

Aldrich, H. E. (1999). *Organizations evolving.* London; Thousand Oaks, CA: Sage Publications.

Aldrich, H. E., Rosen, B., & Woodeard, W. (1987). The impact of social networks on business founding and profit: A longitudinal study. In N. C. Churchill, J. A. Hornaday, B. A. Kirchhoff, O. J. Krasner & K. H. Vesper (Eds.), *Frontiers of entrepreneurship research* (pp. 154-168). Babson Park, MA: Babson College.

Aldrich, H. E., & Zimmer, C. (1986). Entrepreneurship through social networks. In D. L. Sexton, & R. W. Smilor (Eds.), *The art and science of entrepreneurship* (1st ed., pp. 3-23). Cambridge, MA: Ballinger Publishing Company.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411-423.

Armer, M., & Grimshaw, A. D. (1973). *Comparative social research: Methodological problems and strategies*. New York: Wiley; published under the auspices of the Institute for Comparative Sociology.

Armstrong, G. D. (1981). Parametric statistics and ordinal data: A pervasive misconception. *Nursing Research, 30*(1), 60-62.

Armstrong, G. D. (1984). Parametric statistics (Letter to the editor). *Nursing Research, 33*(1), 54.

Autio, E., Sapienza, H. J., & Arenius, P. (2005). International social capital, technology sharing, and foreign market learning in internationalizing entrepreneurial firms. In Dean A. Shepherd and Jerome A. Katz (Eds.), *Advances in entrepreneurship, firm emergence and growth* (pp. 9-42). Boston, MA: Elsevier JAI.

Baloglu, S., & Love, C. (2003). Association meeting planners' perceived performance of Las Vegas: An importance-performance analysis. *Journal of Convention & Exhibition Management, 5*(1), 13.

Bartholomew, S., & Smith, A. D. (2006). Improving survey response rates from chief executive officers in small firms: The importance of social networks. *Entrepreneurship: Theory & Practice, 30*(1), 83-96.

Batjargal, B. (2003). Social capital and entrepreneurial performance in Russia: A longitudinal study. *Organization Studies, 24*(4), 535-556.

Baughn, C. C., Neupert, K. E., Anh, P. T. T., & Hang, N. T. M. (2011). Social capital and human resource management in international joint ventures in Vietnam: A perspective from a transitional economy. *International Journal of Human Resource Management, 22*(5), 1017-1035.

Baum, J. A. C., Calabrese, T., & Silverman, B. S. (2000). Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology. *Strategic Management Journal, 21*(3), 267-294.

Behling, O., & Law, K. S. (2000). *Translating questionnaires and other research instruments: Problems and solutions*. Thousand Oaks, CA: Sage Publications.

Blau, P. M. (1964). *Exchange and power in social life.* New York: J. Wiley.

Boisot, M., & Child, J. (1999). Organizations as adaptive systems in complex environments: The case of China. *Organization Science, 10*(3), 237-252.

Braendle, U. C., Gasser, T., & Noll, J. (2005). Corporate governance in China—Is economic growth potential hindered by *guanxi*? *Business & Society Review, 110*(4), 389-405.

Bray, J. H., & Maxwell, S. E. (1985). Multivariate Analysis of Variance. Beverly Hills, CA: Sage Publications.

Brockhaus, R. H., & Horwitz, P. S. (1986). The psychology of the entrepreneur. In D. L. Sexton, & R. W. Smilor (Eds.), *The art and science of entrepreneurship* (1st ed., pp. 25-48). Cambridge, MA: Ballinger Publishing Company.

Bruderl, J., & Preisendorfer, P. (1998). Network support and the success of newly founded business. *Small Business Economics, 10*(3), 213-225.

Brush, C. G. (1995). *International entrepreneurship: The effect of firm age on motives for internationalization*. New York: Garland Publishing.

Brush, C. G., & Vanderwerf, P. A. (1992). A comparison of methods and sources for obtaining estimates of new venture performance. *Journal of Business Venturing, 7*(2), 157-170.

Buck, T., Liu, X., & Ott, U. (2010). Long-term orientation and international joint venture strategies in modern China. *International Business Review, 19*(3), 223-234.

Burt, R. S. (2005). *Brokerage and closure: An introduction to social capital.* Oxford; New York: Oxford University Press.

Burt, R. S. (1992). *Structural holes: The social structure of competition.* Cambridge, MA: Harvard University Press.

Burt, R. S. (1980a). Autonomy in a social topology. *The American Journal of Sociology, 85*(4), 892-925.

Burt, R. S. (1980b). Models of network structure. *Annual Review of Sociology, 6*, 79-141.

Burt, R. S. (2000). The network structure of social capital. *Research in Organizational Behavior, 22*, 345-423.

Canina, L., Enz, C. A., & Harrison, J. S. (2005). Agglomeration effects and strategic orientations: Evidence from the U.S. lodging industry. *Academy of Management Journal, 48*(4), 565-581.

Carroll, G. R. & Teo, A. C. (1994). Social networks of managers and self-employed. Working paper.

Chakravarthy, B. S. (1986). Measuring strategic performance. *Strategic Management Journal, 7*(5), 437-458.

Chandler, G. N., & Hanks, S. H. (1993). Measuring the performance of emerging businesses: A validation study. *Journal of Business Venturing, 8*(5), 391-408.

Chen, M. (1995). *Asian management systems: Chinese, Japanese, and Korean styles of business*. London; New York: Routledge.

Chen, M. (2001). *Inside Chinese business: A guide for managers worldwide*. Boston, MA: Harvard Business School Press.

China Hotel Association (CHA). (2006-2009). *China Economy Hotel Survey*. Beijing: China Hotel Association.

Chiang, W., Tsai, M., & Wang, L. S. (2004). A DEA evaluation of Taipei hotels. *Annals of Tourism Research, 31*(3), 712-715.

Child, J. (2001). China and international business. In A. M. Rugman, & T. L. Brewer (Eds.), *The Oxford handbook of international business* (1st ed., pp. 681-715). New York: Oxford University Press.

Child, J., & Yuan, L. (1996). Institutional constraints on economic reform: The case of investment decisions in China. *Organization Science, 7*(1), 60-77.

Child, J., & Tse, D. K. (2001). China's transition and its implications for international business. *Journal of International Business Studies, 32*(1), 5-21.

Chow, C. W., Haddad, K. M., Leung, S., & Sterk, W. (2003). Using value-based performance measures to improve hotel profitability. *International Journal of Hospitality & Tourism Administration, 4*(1), 23-50.

Chua, R. Y. J., Morris, M. W., & Ingram, P. (2009). *Guanxi* vs. networking: Distinctive configurations of affect- and cognition-based trust in the networks of Chinese vs. American managers. *Journal of International Business Studies, 40*(3), 490-508.

Chung, W., & Kalnins, A. (2001). Agglomeration effects and performance: A test of the Texas lodging industry. *Strategic Management Journal, 22*(10), 967.

Clason, D., & Dormody, T. J. (1994). Analyzing data measured by individual Likert-type items. *Journal of Agricultural Education, 35*(4), 31-35.

Claver-Cortés, E., Molina-Azorin, J. F., & Pereira-Moliner, J. (2007). The impact of strategic behaviours on hotel performance. *International Journal of Contemporary Hospitality Management, 19*(1), 6-20.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: L. Erlbaum Associates.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: L. Erlbaum Associates.

Coleman, J. S. (1990). *Foundations of social theory* Cambridge, MA: Harvard University Press.

Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology, 94* (Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure), S95-S120.

Converse, J. M., & Presser, S. (1986). *Survey questions: Handcrafting the standardized questionnaire*. Beverly Hills, CA: Sage Publications.

Cooper, A. C. (1995). Challenges in predicting new firm performance. In I. Bull, H. Thomas, & G. Willard (Eds.), *Entrepreneurship: Perspectives on theory building* (1st ed., pp. 109-127). Tarrytown, NY: Elsevier Science Inc.

Covin, J. G., Slevin, D. P., & Covin, T. J. (1990). Content and performance of growth-seeking strategies: A comparison of small firms in high- and low technology industries. *Journal of Business Venturing, 5*(6), 391-412.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed method approaches*. Thousand Oaks, CA: Sage Publications.

Cui, C., Ball, D. F., & Coyne, J. (2002). Working effectively in strategic alliances through managerial fit between partners: Some evidence from Sino–British joint ventures and the implications for R&D professionals. *R&D Management, 32*(4), 343-357.

Dai, B., & Shu, J. (2007). *Economy hotels: International experience and Chinese practice.* Beijing: Tourism Education Press.

de Bruijn, E. J., & Jia, X. (1993). Managing Sino-Western joint ventures: Product selection strategy. *Management International Review (MIR), 33*(4), 335-360.

Delmestri, G., Montanari, F., & Usai, A. (2005). Reputation and strength of ties in predicting commercial success and artistic merit of independents in the Italian feature film industry. *Journal of Management Studies, 42*(5), 975-1002.

Dess, G. G., & Robinson, R. B. Jr. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. *Strategic Management Journal, 5*(3), 265-273.

Dev, C. S., & Brown, J. R. (1990). Marketing strategy, vertical structure, and performance in the lodging industry: A contingency approach. *International Journal of Hospitality Management, 9*(3), 269-282.

Douma, S., George, R., & Kabir, R. (2006). Foreign and domestic ownership, business groups, and firm performance: Evidence from a large emerging market. *Strategic Management Journal, 27*, 637-657.

Elfring, T., & Hulsink, W. (2003). Networks in entrepreneurship: The case of high-technology firms. *Small Business Economics,* 21(4), 409-422.

Elfring, T., & Hulsink, W. (2007). Networking by entrepreneurs: Patterns of tie-formation in emerging organizations. *Organization Studies, 28*(12), 1849-1872.

Enz, C. A., & Canina, L. (2002). The best of times, the worst of times: Differences in hotel performance following 9/11. *Cornell Hotel & Restaurant Administration Quarterly, 43*(5), 41-52.

Enz, C. A., Canina, L., & Liu, Z. (2008). Competitive dynamics and pricing behavior in US hotels: The role of co-location. *Scandinavian Journal of Hospitality & Tourism, 8*(3), 230-250.

Estrin, S., & Prevezer, M. (2011). The role of informal institutions in corporate governance: Brazil, Russia, India, and China compared. *Asia Pacific Journal of Management, 28*(1), 41-67.

Fan, J. P. H., Wong, T. J., & Zhang, T. (2007). Politically connected CEOs, corporate governance, and post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics, 84*(2), 330-357.

Fan, Y. (2002a). *Guanxi*'s consequences: Personal gains at social cost. *Journal of Business Ethics, 38*(4), 371-380.

Fan, Y. (2002b). Questioning *guanxi*: Definition, classification and implications. *International Business Review, 11*(5), 543.

Fernhaber, S. A., & McDougall, P. P. (2005). New venture growth in international markets: The role of strategic adaptation and networking capabilities. In Dean A. Shepherd and Jerome A. Katz (Eds.), *Advances in entrepreneurship, firm emergence and growth* (pp. 111-136). Boston, MA: Elsevier JAI.

Gadiesh, O., Leung, P., & Vestring, T. (2007). The battle for China's good-enough market. *Harvard Business Review, 85*(9), 80-89.

Gallagher, M., & Mansour, A. (2000). An analysis of hotel real estate market dynamics. *Journal of Real Estate Research, 19*(1), 133.

Gargiulo, M., & Benassi, M. (1999). The dark side of social capital. In R. Th. A. J. Leenders & S. M. Gabbay (Eds.), *Corporate social capital and liability* (pp. 298-322). Boston, MA: Kluwer Academic.

Gedajlovic, E. (1993). Ownership, strategy and performance: Is the dichotomy sufficient? *Organization Studies, 14*(5), 731-752.

Geletkanycz, M. A., & Hambrick, D. C. (1997). The external ties of top executives: Implications for strategic choice and performance. *Administrative Science Quarterly, 42*(4), 654-681.

Gold, T., Guthrie, D., & Wank, D. L.,. (2002). *Social connections in China: Institutions, culture, and the changing nature of guanxi.* Cambridge, U.K.; New York: Cambridge University Press.

Granovetter, M. (1974). *Getting a job; a study of contacts and careers.* Cambridge, MA, Harvard University Press.

Granovetter, M. (1973). The strength of weak ties. *The American Journal of Sociology, 78*(6), 1360-1380.

Granovetter, M. (1982). The strength of weak ties: A network theory revisited. In P. V. Marsden & N. Lin (Eds.), *Social structure and network analysis* (pp. 105-130). Beverly Hills, CA: Sage Publications.

Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociological Theory,* 1, 201-233.

Greenwood, R., Deephouse, D. L., & Li, S. X. (2007). Ownership and performance of professional service firms. *Organization Studies, 28*(2), 219-238.

Gu, F. F., Hung, K., & Tse, D. K. (2008). When does *guanxi* matter? Issues of capitalization and its dark sides. *Journal of Marketing, 72*(4), 12-28.

Gu, Z., & Qian, Y. (1999). Hotel managerial ownership and firm performance: An empirical investigation. *Tourism & Hospitality Research, 1*(2), 145.

Guthrie, D. (1998). The declining significance of *guanxi* in China's economic transition. *The China Quarterly,* (154), 254-282.

Haktanir, M., & Harris, P. (2005). Performance measurement practice in an independent hotel context: A case study approach. *International Journal of Contemporary Hospitality Management, 17*(1), 39-50.

Hansen, E. L. (1995). Entrepreneurial networks and new organization growth. *Entrepreneurship: Theory & Practice, 19*(4), 7-19.

Harpza, I. (1996). International management survey research. In B. J. Punnett, & O. Shenkar (Eds.), *Handbook for international management research* (pp. 37-62). Cambridge, MA: Blackwell Publishers Inc.

Harrigan, K. R. (1988). Joint ventures and competitive strategy. *Strategic Management Journal, 9*(2), 141-158.

Hite, J. M., & Hesterly, W. S. (2001). The evolution of firm networks: From emergence to early growth of the firm. *Strategic Management Journal, 22*(3), 275-286.

Hoang, H., & Antoncic, B. (2003). Network-based research in entrepreneurship: A critical review. *Journal of Business Venturing, 18*(2), 165-187.

Huang, H., Chu, W., & Wang, W. (2007). Strategic performance measurement and value drivers: Evidence from international tourist hotels in an emerging economy. *Service Industries Journal, 27*(8), 1111-1128.

Ingram, P., & Baum, J. A. C. (1997). Chain affiliation and the failure of Manhattan hotels, 1898-1980. *Administrative Science Quarterly, 42*(1), 68-102.

Ismail, J. A., Dalbor, M. C., & Mills, J. E. (2002). Lodging-segment variability: Using RevPAR to analyze. *Cornell Hotel and Restaurant Administration Quarterly, 43*(6), 73-80.

Jack, S. (2005). The role, use and activation of strong and weak network ties: A qualitative analysis. *Journal of Management Studies, 42*(6), 1233-1259.

Jack, S., Dodd, S. D., & Anderson, A. (2004). Social structures and entrepreneurial networks: The strength of strong ties. *Entrepreneurship and Innovation, 5*(2), 107-120.

Jack, S., Dodd, S. D., & Anderson, A. R. (2008). Change and the development of entrepreneurial networks over time: A processual perspective. *Entrepreneurship & Regional Development, 20*(2), 125-159.

Jacobs, C. A. (1997). The truth about REVPAR. *Lodging Hospitality, 53*(4), 11.

Jamieson, S. (2004). Likert scales: How to (ab)use them. *Medical Education, 38*(12), 1217-1218.

Jeffrey, D., & Barden, R. R. D. (2000). Monitoring hotel performance using occupancy time-series analysis: The concept of occupancy performance space. *International Journal of Tourism Research, 2*(6), 383-402.

Jeffrey, D., & Barden, R. R. D. (2001). Multivariate models of hotel occupancy performance and their implications for hotel marketing. *International Journal of Tourism Research, 3*(1), 33-44.

Jeffrey, D., & Hubbard, N. J. (1988). Temporal dimensions and regional patterns of hotel occupancy performance in England: A time series analysis of midweek and weekend occupancy rates in 266 hotels, in 1984 and 1985. *International Journal of Hospitality Management, 7*(1), 63-80.

Johannisson, B. (2000). Networking and entrepreneurial growth. In D. L. Sexton and H.Landström (Eds.), *The Blackwell handbook of entrepreneurship; handbook of entrepreneurship* (pp. 368-386). Malden, MA: Blackwell Business.

Julien, P., Andriambeloson, E., & Ramangalahy, C. (2004). Networks, weak signals and technological innovations among SMEs in the land-based transportation equipment sector. *Entrepreneurship & Regional Development*, 16(4), 251-269.

Kim, T., Oh, H., & Swaminathan, A. (2006). Framing interorganizational network change: A network inertia perspective. *Academy of Management Review, 31*(3), 704-720.

King, A. Y. C. (1985). The individual and group in Confucianism: A relational perspective. In Munro, D. J. (Eds.), *Individualism and Holism: Studies in Confucian and Taoist values* (pp. 57-70). Ann Arbor, MI: Center for Chinese Studies, the University of Michigan.

Knapp, T. R. (1984). Parametric statistics (letter to the editor). *Nursing Research, 33*(1), 54.

Knapp, T. R. (1990). Treating ordinal scales as interval scales: An attempt to resolve the controversy. *Nursing Research, 39*(2), 121-123.

Koenig, N., & Bischoff, E. E. (2004). Analyzing seasonality in Welsh room occupancy data. *Annals of Tourism Research, 31*(2), 374.

Krackhardt, D. (1992). The strength of strong ties: The importance of philos in organizations. In N. Nohria, & R. G. Eccles (Eds.), *Networks and organizations: Structure, form, and action* (pp. 216-239). Boston, MA: Harvard Business School Press.

Krug, B., & Hendrischke, H. (2008). Framing China: Transformation and institutional change through co-evolution. *Management and Organization Review, 4*(1), 81-108.

Labovitz, S. (1967). Some observations on measurement and statistics. *Social Forces, 46*(2), pp. 151-160.

Le, T. & O'Brien JP. (2011). Can two wrongs make a right? State ownership and debt in a transition economy. *Journal of Management Studies*, forthcoming.

Lerner, M., Brush, C. G., & Hisrich, R. (1997). Israeli women entrepreneurs: An examination of factors affecting performance. *Journal of Business Venturing, 12*(4), 315-339.

Li, H., & Zhang, Y. (2007). The role of managers' political networking and functional experience in new venture performance: Evidence from China's transition economy. *Strategic Management Journal, 28*(8), 791-804.

Li, J. J. (2005). The formation of managerial networks of foreign firms in China: The effects of strategic orientations. *Asia Pacific Journal of Management, 22*, 423-443.

Li, J. J., Poppo, L., & Zhou, K. Z. (2008). Do managerial ties in China always produce value? Competition, uncertainty, and domestic vs. foreign firms. *Strategic Management Journal, 29*(4), 383-400.

Li, J. J., Zhou, K. Z., & Shao, A. T. (2009). Competitive position, managerial ties, and profitability of foreign firms in China: An interactive perspective. *Journal of International Business Studies, 40*(2), 339-352.

Liao, J. (2004). Entrepreneurial growth: Predictors and indicators. In H. P. Welshch (Ed.), *Entrepreneurship: The way ahead* (pp. 117-131). New York: Routledge.

Lin, J. Y., Cai, F., & Li, Z. *Zhongguo de qi ji. English; the China miracle : Development strategy and economic reform* (Rev. ed.). Hong Kong: Published for the Hong Kong Centre for Economic Research and the International Center for Economic Growth by the Chinese University Press, 2003.

Lin, N. (2001a). Building a network theory of social capital. In N. Lin, K. Cook, & R. Burt (Eds.), *Social capital, theory and research* (pp. 3-29). New York: Aldine de Gruyter.

Lin, N. (2001b). The position generator: Measurement techniques for investigations of social capital. In N. Lin, K. Cook & R. Burt (Eds.), *Social capital, theory and research* (pp. 57-81). New York: Aldine de Gruyter.

Lin, N., & Dumin, M. (1986). Access to occupations through social ties. *Social Networks, 8*(4), 365-385.

Liu, Z., Hsu, C. & Huang, S. (2010a, June) *Obtaining intangible resources through entrepreneurs' network mix: A multi-case study of new firms in an emerging economy.* Paper presented at International Council for Small Business (ICSB) World Conference, Cincinnati, OH.

Liu, Z., Huang, S., & Hsu, C. (2010b, July). *Patterns of managerial ties in entrepreneurial firms in China: A comparative study of economy hotel chains of different ownership types.* Paper presented at the International Council on Hotel, Restaurant, and Institutional Education Conference, San Juan, Puerto Rico.

Liu, Z., Huang, S., & Hsu, C. (2011). *A multi-dimensional examination of managers' political ties in a transitional economy.* Manuscript submitted for publication.

Luo, Y. (2007). *Guanxi and business* (2nd ed.). New Jersey: World Scientific.

Luo, Y. (2003). Industrial dynamics and managerial networking in an emerging market: The case of China. *Strategic Management Journal, 24*(13), 1315-1327.

Luo, Y., & Chen, M. (1997). Does *guanxi* influence firm performance? *Asia Pacific Journal of Management, 14*(1), 1-16.

Ma, X., Yao, X., & Xi, Y. (2006). Business group affiliation and firm performance in a transition economy: A focus on ownership voids. *Asia Pacific Journal of Management*, 23(4), 467-483.

Mahoney, J. T. (2005). *Economic foundations of strategy*. Thousand Oaks, CA: Sage.

Mak, B. (2008). The future of the state-owned hotels in China: Stay or go? *International Journal of Hospitality Management*, 27(3), 355-367.

Manion, M. (1994). Survey research in the study of contemporary China: Learning from local samples. *The China Quarterly, 139,* 741-765.

March, J. G., & Sutton, R. I. (1997). Organizational performance as a dependent variable. *Organization Science, 8*(6), 698-706.

Marsden, P. V. (1990). Network data and measurement. *Annual Review of Sociology, 16*(1), 435-463.

Marsden, P. V., & Campbell, K. E. (1984). Measuring tie strength. *Social Forces, 63*(2), 482-501.

McDougall, P. P. (1989). International versus domestic entrepreneurship: New venture strategic behavior and industry structure. *Journal of Business Venturing, 4*(6), 387-400.

McEvily, B., & Zaheer, A. (1999). Bridging ties: A source of firm heterogeneity in competitive capabilities. *Strategic Management Journal, 20*(12), 1133-1156.

McGee, J. E., Dowling, M. J., & Megginson, W. L. (1995). Cooperative strategy and new venture performance: The role of business strategy and management experience. *Strategic Management Journal, 16*(7), 565-580.

Mihalič, T., & Cvelbar, L. K. (2008). Hotel ownership structure as a competitiveness factor: The case of the Slovenian hotel industry. *Acta Turistica, 20*(2), 173-199.

Mitchell, J. C. (1987). The components of strong ties among homeless women. *Social Networks, 9*(1), 37-47.

Molina-Azorin, J. F., Pereira-Moliner, J., & Claver-Cortés, E. (2010). The importance of the firm and destination effects to explain firm performance. *Tourism Management, 31*(1), 22-28.

Murray, M. P. (2006). Avoiding invalid instruments and coping with weak instruments. *Journal of Economic Perspectives,* 20(4), 111-132.

National Bureau of Statistics of China (NBSC). (2011). Retrieved April 2011, from www.stats.gov.cn.

Nee, V. (1992). Organizational dynamics of market transition: Hybrid forms, property rights, and mixed economy in China. *Administrative Science Quarterly, 37*(1), 1-27.

Park, S. H., & Luo, Y. (2001). *Guanxi* and organizational dynamics: Organizational networking in Chinese firms. *Strategic Management Journal, 22*(5), 455-477.

Peng, M. W. (1997). Firm growth in transitional economies: Three longitudinal cases from China, 1989-96. *Organization Studies, 18*(3), 385-413.

Peng, M. W. (2000). *Business strategies in transition economies*. Thousand Oaks, CA: Sage Publications Inc.

Peng, M. W. (2002). Towards an institution-based view of business strategy. *Asia Pacific Journal of Management, 19*(2), 251.

Peng, M. W. (2003). Institutional transitions and strategic choices. *Academy of Management Review, 28*(2), 275-296.

Peng, M. W., & Heath, P. S. (1996). The growth of the firm in planned economies in transition: Institutions, organizations, and strategic choice. *Academy of Management Review, 21*(2), 492-528.

Peng, M. W., & Luo, Y. (2000). Managerial ties and firm performance in a transition economy: The nature of a micro-macro link. *Academy of Management Journal, 43*(3), 486-501.

Peng, M. W., Tan, J., & Tong, T. W. (2004). Ownership types and strategic groups in an emerging economy. *Journal of Management Studies, 41*(7), 1105-1129.

Peng, M. W., & Zhou, J. Q. (2005). How network strategies and institutional transitions evolve in Asia. *Asia Pacific Journal of Management, 22*, 321-336.

Podolny, J. M., & Page, K. L. (1998). Network forms of organizations. *Annual Review of Sociology, 24*(1), 57.

Praag, C. M. (2003). Business survival and success of young small business owners. *Small Business Economics, 21*(1), 1.

Puffer, S. M., McCarthy, D. J., & Boisot, M. (2010). Entrepreneurship in Russia and China: The impact of formal institutional voids. *Entrepreneurship: Theory & Practice, 34*(3), 441-467.

Ragin, C. C. (1987). *The comparative method: Moving beyond qualitative and quantitative strategies*. Berkeley, CA: University of California Press.

Rahman, N. (2008). Resource and risk trade-offs in *guanxi*-based IJVs in China. *Asia Pacific Business Review, 14*(2), 233-251.

Ralston, D. A., Terpstra-Tong, J., Terpstra, Z., & Ergi, C. (2006). Today's state-owned enterprises of China: Are they dying dinosaurs or dynamic dynamos? *Strategic Management Journal, 27*(9), 825-843.

Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management, 35*(3), 718-804.

Robinson, K. C. (1999). An examination of the influence of industry structure on eight alternative measures of new venture performance for high potential independent new ventures. *Journal of Business Venturing, 14*(2), 165-187.

Roy, A., Walters, P. G. P., & Luk, S. T. K. (2001). Chinese puzzles and paradoxes conducting business research in China. *Journal of Business Research, 52*(2), 203-210.

Ruef, M. (2002). Strong ties, weak ties and islands: Structural and cultural predictors of organizational innovation. *Industrial and Corporate Change, 11*(3), 427-449.

Schacter, D. L. (1999). The seven sins of memory: Insights from psychology and cognitive neuroscience. *American Psychologist, 54*(3), 182-203.

Severt, D., Wang, Y., Chen, P., & Breiter, D. (2007). Examining the motivation, perceived performance, and behavioral intentions of convention attendees: Evidence from a regional conference. *Tourism Management, 28*(2), 399-408.

Sheng, S., Zhou, K. Z., & Li, J. J. (2011). The effects of business and political ties on firm performance: Evidence from China. *Journal of Marketing, 75*(1), 1-15.

Shenkar, O., & von Glinow, M. A. (1994). Paradoxes of organizational theory and research: Using the case of China to illustrate national contingency. *Management Science, 40*(1), 56-71.

Short, D. G. T. (2003). Individual hotel enterprises and the influence of the strategic choice model. *Journal of Hospitality & Leisure Marketing, 10*(3), 101.

Siegel, J. (2007). Contingent political capital and international alliances: Evidence from South Korea. *Administrative Science Quarterly, 52*(4), 621-666.

Simonin, B. L. (1997). The importance of collaborative know-how: An empirical test of the learning organization. *Academy of Management Journal, 40*(5), 1150-1174.

Simsek, Z., Veiga, J. F., Lubatkin, M. H., & Dino, R. N. (2005). Modeling the multilevel determinants of top management team behavioral integration. *Academy of Management Journal, 48*(1), 69-84.

Smelser, N. J. (1976). *Comparative methods in the social sciences*. Englewood Cliffs, NJ: Prentice-Hall.

Spreng, R. A. (1999). Perceived performance in satisfaction research. *Journal of Consumer Satisfaction, Dissatisfaction & Complaining Behavior, 12*, 100-108.

Stam, W., & Elfring, T. (2008). Entrepreneurial orientation and new venture performance: The moderating role of intra- and extra-industry social capital. *Academy of Management Journal, 51*(1), 97-111.

Starr, J. A., & MacMillan, I. C. (1990). Resource cooptation via social contracting: Resource acquisition strategies for new ventures. *Strategic Management Journal, 11*(Special Issue: Corporate Entrepreneurship), 79-92.

Steensma, H. K., Tihanyi, L., Lyles, M. A., & Dhanaraj, C. (2005). The evolving value of foreign partnerships in transitioning economies. *Academy of Management Journal, 48*(2), 213-235.

Stinchcombe, A. L. (1965). Social structures and organizations. In J. G. March (Ed.), *Handbook of organizations* (pp. 142-193). Chicago, IL: Rand McNally.

Stuart, T. E., & Sorenson, O. (2005). Social networks and entrepreneurship. In Alvarez, Sharon A.Agarwal, Rajshree & Sorenson,Olav. (Eds.), *Handbook of entrepreneurship research: Interdisciplinary perspectives* (pp. 233-252). New York: Springer.

Stuart, T. E. and Sorenson, O. (2007). Strategic networks and entrepreneurial ventures. *Strategic Entrepreneurship Journal, 1,* 211-227.

Su, C., Sirgy, M. J., & Littlefield, J. E. (2003). Is *guanxi* orientation bad, ethically speaking? A study of Chinese enterprises. *Journal of Business Ethics, 44*(4), 303-312.

Suarez, F. F. (2005). Network effects revisited: The role of strong ties in technology selection. *Academy of Management Journal, 48*(4), 710-720.

Tan, J. (2002). Impact of ownership type on environment-strategy linkage and performance: Evidence from a transitional economy. *Journal of Management Studies, 39*(3), 333-354.

Tan, J. (2007). Phase transitions and emergence of entrepreneurship: The transformation of Chinese SOEs over time. *Journal of Business Venturing, 22*(1), 77-96.

Tan, Z. & Shi, Y. (2011, April 11). China now world's third-largest tourism destination based on number of international arrivals according to United Nations World Tourism Organization. *China Daily.* Retrieved April 11, 2011 from www.hotel-online.com/News/PR2011_2nd/Apr11_ChinaTourism.html

Tan, J., Yang, J., & Veliyath, R. (2009). Particularistic and system trust among small and medium enterprises: A comparative study in China's transition economy. *Journal of Business Venturing, 24*(6), 544-557.

Tang, J., Tang, Z., Zhang, Y., & Li, Q. (2007). The impact of entrepreneurial orientation and ownership type on firm performance in the emerging region of China. *Journal of Developmental Entrepreneurship, 12*(4), 383-397.

Tihanyi, L., Griffith, D. A., & Russell, C. J. (2005). The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis. *Journal of International Business Studies, 36*(3), 270-283.

Tjosvold, D., Peng, A. C., Chen, Y. F., & Su, F. (2008). Business and government interdependence in China: Cooperative goals to develop industries and the marketplace. *Asia Pacific Journal of Management, 25,* 225-249.

Tsang, E. W. K. (1998). Can *guanxi* be a source of sustained competitive advantage for doing business in China? *Academy of Management Executive, 12*(2), 64-73.

Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review, 61*(4), 674-698.

Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly, 42*(1), 35-67.

Visser, P. S., Krosnick, J. A., & Lavrakas, P. J. (2000). Survey research. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 223-252). New York: Cambridge University Press.

Walder, A. G. (2011). From control to ownership: China's managerial revolution. *Management and Organization Review, 7*(1), 19-38.

Wang, s., & Liu, X. (2002). The base of trust: A rationalist interpretation. *Sociological Research,* (3), 23-39.

Wank, D. L. (1999). *Commodifying communism: Business, trust, and politics in a Chinese city.* New York: Cambridge University Press.

Warren, D. E., Dunfee, T. W., & Li, N. (2004). Social exchange in China: The double-edged sword of *guanxi*. *Journal of Business Ethics, 55*(4), 355-372.

Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications.* New York: Cambridge University Press.

Watson, J. (2007). Modeling the relationship between networking and firm performance. *Journal of Business Venturing, 22*(6), 852-874.

Wikipedia, (2010). Ownership. Retrieved January 2011 from http://en.wikipedia.org/wiki/Ownership.

Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing, 20*(1), 71-91.

Wing, C. C. K., & Yiu, M. F. K. (1996). Firm dynamics and industrialization in the Chinese economy in transition: Implications for small business policy. *Journal of Business Venturing, 11*(6), 489.

Wood, D. E. J. (1994). Using rooms-revenue-per-available-room analysis to forecast rooms revenue *The Real Estate Finance, 9*(4), 20-30.

Wu, L., Wang, C., Chen, C., & Pan, L. (2008). Internal resources, external network, and competitiveness during the growth stage: A study of Taiwanese high-tech ventures. *Entrepreneurship: Theory & Practice, 32*(3), 529-549.

Wu, W., Wu, C., & Rui, O. M. (2010). Ownership and the value of political connections: Evidence from China. *European Financial Management*.

Xin, K., & Pearce, J. L. (1996). *Guanxi*: Connections as substitutes for formal institutional support. *Academy of Management Journal, 39*(6), 1641-1658.

Yang, M. M. (1994). *Gifts, favors, and banquets: The art of social relationships in China,* Ithaca, NY: Cornell University Press.

Yang, M. M. (2002). The resilience of *guanxi* and its new deployments: A critique of some new *guanxi* scholarship. *The China Quarterly, 170*, 459-476.

Yin, R. K. *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, 2003.

Yli-Renko, H., Autio, E., & Sapienza, H. J. (2001). Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms. *Strategic Management Journal, 22*(6), 587.

Yogo, M. (2004). Estimating the elasticity of inter-temporal substitution when instruments are weak. *The Review of Economics and Statistics*, 86(3), 797-810.

Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal, 38*(2), 341-363.

Zaheer, S., & Mosakowski, E. (1997). The dynamics of the liability of foreignness: A global study of survival in financial services. *Strategic Management Journal, 18*(6), 439-463.

Zahra, S. A. (1996). Technology strategy and new venture performance: A study of corporate-sponsored and independent biotechnology ventures. *Journal of Business Venturing, 11*(4), 289-321.

Zahra, S. A., Ireland, R. D., & Hitt, M. A. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal, 43*(5), 925-950.

Zhang, J., Souitaris, V., Soh, P., & Wong, P. (2008). A contingent model of network utilization in early financing of technology ventures. *Entrepreneurship: Theory & Practice, 32*(4), 593-613.

Zhang, J., & Wong, P. (2008). Networks vs. market methods in high-tech venture fundraising: The impact of institutional environment. *Entrepreneurship & Regional Development, 20*(5), 409-430.

Zhang, Y., & Li, H. (2010). Innovation search of new ventures in a technology cluster: The role of ties with service intermediaries. *Strategic Management Journal, 31*(1), 88-109.

Zhang, Y., & Zhang, Z. (2006). *Guanxi* and organizational dynamics in China: A link between individual and organizational levels. *Journal of Business Ethics, 67*(4), 375-392.

Zhao, L., & Aram, J. D. (1995). Networking and growth of young technology-intensive ventures in China. *Journal of Business Venturing, 10*(5), 349-370.

Zheng, Y. (1986). Connections. In Dernberger, R. F. *et al*. (Eds.), *The Chinese: Adapting the past, building the future*, (pp. 351-361). Ann Arbor, MI: Center for Chinese Studies, the University of Michigan.

Zou, H., & Adams, M. B. (2008). Corporate ownership, equity risk and returns in the people's republic of China. *Journal of International Business Studies*, *39*(7), 1149-1168.